



LOCAL TECHNICAL ASSISTANCE PROGRAM

1997

RESOURCES DIRECTORY

Publication No. FHWA-SA-97-099



U.S. Department
of Transportation

**Federal Highway
Administration**

The *LTAP Resources Directory* is a publication of the LTAP T² Clearinghouse. It is produced as part of the Contract No. DTFH61-95-C-00087 between the American Public Works Association and the Federal Highway Administration titled "Local Technical Assistance Program Clearinghouse." This document is disseminated under the sponsorship of the Department of Transportation in the interest of information exchange. The United States Government assumes no liability for its contents or use thereof. The contents of this report reflect the views of the contractor, who is responsible for the accuracy of the data presented herein. The contents do not necessarily reflect the official policy of the Department of Transportation.

For more information contact:

LTAP T² Clearinghouse, American Public Works Association
1301 Pennsylvania Avenue N.W. Suite 501, Washington, DC 20004
Phone: (202) 347-7267, Fax (202) 737-9153, E-mail ltap@patriot.net

Table of Contents



Introduction	1
Bridges	5
Environment	7
Equipment	9
Information Management	19
Management and Training	21
Materials	27
Organizations	35
Planning and Design	45
Risk Management	53
Roads	57
Safety	73
Signs and Signals	81
Snow and Ice Control	85
Traffic	87
Title Index	97
LTAP T ² Centers	105
LTAP T ² Centers Web Pages	111
Additions	113

Introduction



Local Technical Assistance Program

Established in 1981 as the Rural Technical Assistance Program, the Local Technical Assistance Program (LTAP) is a program of the Federal Highway Administration (FHWA). LTAP provides for local highway agencies' improved access to highway technology to meet the growing demands placed on local roads, bridges and public transportation.

LTAP has established a nationwide system of technology transfer (T²) centers, some of which are located in universities, with others in State highway agencies. Six centers serve American Indian Tribal Governments. Each center develops a mix of technology transfer tools and information to most effectively address the needs of the local/tribal highway community.

Funding for the centers is provided through the Federal-aid process, which requires support and involvement from State highway agencies. The funding for the centers comes from Federal LTAP funds, State departments of transportation, universities, local agencies, and finances designated by State legislation. The centers serving American Indian Tribal Governments are jointly funded by FHWA and the U.S. Department of the Interior Bureau of Indian Affairs.

The Intermodal Surface Transportation Efficiency Act of 1991 provided authority to expand the program into urban areas as resources become available through 1997. This new authorization also included an emphasis on intergovernmental transporta-

tion planning for American Indian tribal governments, through training and technical assistance.

The Technology Transfer Clearinghouse, operated under contract to the FHWA by the American Public Works Association, links the centers with information and technology available from other sources.

The LTAP Strategic Plan

The LTAP Strategic Plan, developed in 1996, established a vision, mission, goals and strategies for the LTAP program.

LTAP Vision: To be world renowned as the paramount resource in developing and transferring innovative technologies, proven solutions and reliable service to successfully resolve the transportation challenges facing local government.

LTAP Mission: The national Local Technical Assistance Program mission is to foster a safe, efficient, environmentally sound transportation system by improving skills and knowledge of local transportation providers through training, technical assistance and technology transfer.

LTAP Goals

- Continue to diversify and to deliver quality customer services
- Communicate the program's value to LTAP partners and customers
- Develop a premier technology transfer network
- Obtain sustainable and predictable funding

Strategies

- Expand and strengthen partnerships
- Deliver quality services
- Secure funding resources
- Improve LTAP recognition
- Develop and implement measurement and evaluation methods
- Empower LTAP staff
- Expand Clearinghouse role
- Enhance technology transfer and networking
- Integrate research with local needs

Information on Entries

Sources of data for this issue of the directory were the T² centers, State highway agencies, professional organizations, the private sector, universities, and FHWA.

The LTAP T² centers are major contributors to this directory and they keep up with new developments in training. The centers are excellent resources for supplements to the entries listed in this directory. You are encouraged to contact the T² center in your State about entries in this directory or information about training and resources available in your state.

Using the Directory

The directory is divided into sections by the following subjects:

Bridges: This section contains training and technology resources that deal with structures spanning roadways or carrying roads over rivers, streams, railroads, depressed areas, and other roadways which are constructed usually of steel, reinforced concrete, or wood.

Environment: This section contains training and technology resources that deal with drainage, the control through planning,

design, construction, and maintenance of the flow of water, both surface and underground, through, under, and alongside highways. This section also contains resources dealing with roadside vegetation management.

Equipment: This section contains training and technology resources dealing with the mechanical devices and specialized units used to excavate, fill, compact, transport, pave, and maintain roads and streets.

Information Management: This section contains training and technology resources dealing with activities and tools of information management, such as databases and software. This section also includes resources for obtaining transportation data and other information.

Management and Training: This section contains training and technology resources that deal with the art of developing a mix of personnel, material, machines, and methods to achieve a specified goal. This section also includes resources concerning public relations and communications skills.

Materials: This section contains training and technology resources that deal with classes and properties of materials commonly used in the construction and maintenance of transportation facilities.

Organizations: This is a special section containing information about related and other sources of training and technology resources in the field of transportation.

Planning and Design: This section contains training and technology resources that deal with activities associated with civil engineering in the area of transportation planning and design.

Risk Management: This section contains training and technology resources that deal with liability, accident reconstruction, tort litigation and other risk management procedures for highway departments.

Roads: This section contains training and technology resources that deal with the construction, maintenance and management of various types of paved and unpaved roads.

Safety: This section contains training and technology resources that deal with the methods of ensuring the safety of road and highway department employees, pedestrians and the traveling public.

Signs and Signals: This section contains training and technology resources that deal with the selection, installation and maintenance of roadway signs, traffic signals and pavement markings.

Snow and Ice Control: This section contains training and technology resources that deal with effective and innovative winter operations.

Traffic: This section contains training and technology resources dealing with the safe movement of vehicles through intersections, work areas and special zones. This section also includes resources that concern highway capacity and congestion.

Each resource in the directory is composed of the following components:

- The title
- The type of product (such as course, manual, or videocassette)
- The source of the item
- A contact who can give further information, as well as an e-mail address and Internet World Wide Web site, where available
- A short description of the product
- The targeted audience.

Updates

The Clearinghouse directory will be updated at yearly intervals. Each "source" unit is urged to examine the directory and notify

the T² Clearinghouse of any changes that may have occurred since the last directory was published.

The directory is also available on a diskette along with the run-time software for Inmagic DB/Textworks. Entries in the electronic directory are searchable by title, source of item, subject and key words. Contact your local T² Center or the T² Clearinghouse for a copy.

Bridges



Bridge Maintenance System

Product: Videocassette (35 min.)

Date produced: 1987

Source: Pennsylvania Department of Transportation

Contact: Pennsylvania Department of Transportation Employees Library, Forum Place, 555 Walnut St., 8th Floor, Harrisburg, PA 17101-1900

Telephone/Fax: Tel: (717) 787-6527, Fax: (717) 772-8282

Cost/terms: \$35

Description: This videocassette explains Bridge Management Systems as a tool for use in determining present and future needs for maintenance, rehabilitation and replacement of bridges in Pennsylvania. It enables cost-effective management of the bridge system statewide by evaluating data and prioritizing work schedules (AV#00565).

Target audience: Maintenance supervisors

Bridge Safety Inspection for Local Governments

Product: Videocassette (12 min.)

Date produced: 1988

Source: Pennsylvania Department of Transportation

Contact: Pennsylvania Department of Transportation Employees Library, Forum Place, 555 Walnut St., 8th Floor, Harrisburg, PA 17101-1900

Telephone/Fax: Tel: (717) 787-6527, Fax: (717) 772-8282

Cost/terms: \$35

Description: This videocassette describes the requirements and responsibilities for bridge safety inspection for local governments (AV#00750).

Target audience: Local government officials

Load Posted Bridges

Product: Videocassette (7 min.)

Date produced: 1988

Source: Pennsylvania Department of Transportation

Contact: Pennsylvania Department of Transportation Employees Library, Forum Place, 555 Walnut St., 8th Floor, Harrisburg, PA 17101-1900

Telephone/Fax: Tel: (717) 787-6527, Fax: (717) 772-8282

Cost/terms: \$35

Description: This videocassette briefly describes the requirements and responsibilities suitable for local and county governments, public, or private associations (AV#00645).

Target audience: Local government officials, road superintendents

Pile Cap Replacement

Product: Videocassette (13 min.)

Date produced: 1991

Source: Oregon Department of Transportation

Contact: Wes Heidenreich, Oregon Technology Transfer Center, Oregon Department of Transportation, 2950 State St., Salem, OR 97310

Telephone/Fax: Tel: (503) 986-2854, Fax: (503) 986-2844

E-mail/Other: E-mail:

wesley.HEIDENREICH@state.or.us

Cost/terms: Free loan; may duplicate

Description: This videocassette shows the procedure for replacing a timber pile cap beneath a concrete surfaced bridge while the bridge remains open to traffic. Replacement of the cap is aided by the use of rollers mounted on brackets that clamp to the cap's supporting piles.

Target audience: Maintenance supervisors and crews

Pre-stressed Concrete Bridge: Safety Inspection

Product: Videocassette (58 min.)

Date produced: 1984

Source: Pennsylvania Department of Transportation

Contact: Pennsylvania Department of Transportation Employees Library, Forum Place, 555 Walnut St., 8th Floor, Harrisburg, PA 17101-1900

Telephone/Fax: Tel: (717) 787-6527, Fax: (717) 772-8282

Cost/terms: \$35

Description: Various techniques of bridge inspection for a two-person team are described. In the videotape a team checks tools and equipment and organizes a field trip to their assigned bridges. The program shows a run-through of a bridge inspection and examples of various bridges' pre-stressed concrete beams. Historical information on the development and fabrication of pre-stressed concrete beams is also included (AV#00161).

Target audience: Bridge inspectors

Scour the Bridge: Engineers' Dilemma

Product: Videocassette (20 min.)

Date produced: 1988

Source: Pennsylvania Department of Transportation

Contact: Pennsylvania Department of Transportation Employees Library, Forum Place, 555 Walnut St., 8th Floor, Harrisburg, PA 17101-1900

Telephone/Fax: Tel: (717) 787-6527, Fax: (717) 772-8282

Cost/terms: \$35

Description: This videotape alerts bridge inspectors to the problems of scour and its potential for bridge damage (AV#00752).

Target audience: Bridge inspectors

Timber Bridge Conference: Build Better and Save with Timber Bridges Series

Product: Videocassette series

Date produced: 1987

Source: Pennsylvania Department of Transportation

Contact: Pennsylvania Department of Transportation Employees Library, Forum Place, 555 Walnut St., 8th Floor, Harrisburg, PA 17101-1900

Telephone/Fax: Tel: (717) 787-6527, Fax: (717) 772-8282

Cost/terms: \$35

Description: The series includes the following: Timber Bridge Conference: Build Better and Save with Timber Bridges (24 min.) (AV#00597); Closing Comments (16 min.) (AV#00608); Design of Bridges (44 min.) (AV#00604); Different Bridge Types (22 min.) (AV#00605); Discussion of Raw Materials (22 min.) (AV#00599); Fabrication and Erection of Bridges (16 min.) (AV#00606); Funding and Assistance Programs (13 min.) (AV#00600); General Concepts and Costs (49 min.) (AV#00598); Pre-Fabricated and Packaged Bridges (20 min.) (AV#00601); Specifications and Standards (19 min.) (AV#00602); Timber Preservative Treatments (12 min.) (AV#00603); Use and Maintenance of Bridges (19 min.) (AV#00607).

Target audience: Construction crews, supervisors, general

Timber Bridge Update #1

Product: Videocassette (17 min.)

Date produced: 1991

Source: Pennsylvania Department of Transportation

Contact: Pennsylvania Department of Transportation Employees Library, Forum Place, 555 Walnut St., 8th Floor, Harrisburg, PA 17101-1900

Telephone/Fax: Tel: (717) 787-6527, Fax: (717) 772-8282

Cost/terms: \$35

Description: This videocassette presents an update on timber bridges in Pennsylvania. It introduces the world's first hardwood/steel composite timber bridge (AV#01329).

Target audience: Public officials, engineers

Environment



Drainage, Drainage, Drainage: The Importance of Drainage on Local Roads

Product: Course Materials

Date produced: 1993

Source: Maine Local Roads Center

Contact: Peter Coughlan, Director, Maine Local Roads Center, Maine DOT Technical Services Division, 16 State House Station, Augusta, ME 04333-0016

Telephone/Fax: Tel: (207) 287-2152, Fax: (207) 287-3292

E-mail/Other: E-mail:

peter.coughlan@state.me.us

Cost/terms: Free to T² Centers, \$25 to all others, may duplicate with proper credits

Description: This manual is geared for small towns or other small government agencies involved in the day-to-day business of maintaining the local road system. Most of the material is easy to understand and user-friendly.

Target audience: Municipal officials, road commissioners, public works personnel

Drainage of Asphalt Pavement Structures

Product: Manual

Date produced: 1984

Source: Asphalt Institute

Contact: Ross Bentsen, Director of Education, Asphalt Institute, Research Park Drive, P.O. Box 14052, Lexington, KY 40512-4052

Telephone/Fax: Tel: (606) 288-4983

Cost/terms: \$10

Description: This manual contains information on the proper surface and subsurface drainage of asphalt pavements for all purposes, including highways, roads, streets, parking areas and airfields (MS-15).

Target audience: Engineers

Drainage Pipe Installation

Product: Videocassette (17 min.)

Date produced: 1987

Source: Pennsylvania Department of Transportation

Contact: Pennsylvania Department of Transportation Employees Library, Forum Place, 555 Walnut St., 8th Floor, Harrisburg, PA 17101-1900

Telephone/Fax: Tel: (717) 787-6527, Fax: (717) 772-8282

Cost/terms: \$35

Description: The primary emphasis of this videotape is on proper compaction techniques. It includes a lesson plan for determining slope and grade (AV#00519).

Target audience: Road supervisors, foremen

Erosion and Sedimentation Control Highway Construction

Product: Videocassette (18 min.)

Date produced: 1985

Source: Pennsylvania Department of Transportation

Contact: Pennsylvania Department of Transportation Employees Library, Forum Place, 555 Walnut St., 8th Floor, Harrisburg, PA 17101-1900

Telephone/Fax: Tel: (717) 787-6527, Fax: (717) 772-8282

Cost/terms: \$35

Description: This video presents sedimentation and erosion control measures for use along roadways (AV#00378).

Target audience: Work crews, supervisors

Erosion Control Material Installation: Demonstration

Product: Videocassette (30 min.)

Date produced: 1985

Source: Pennsylvania Department of Transportation

Contact: Pennsylvania Department of Transportation Employees Library, Forum Place, 555 Walnut St., 8th Floor, Harrisburg, PA 17101-1900

Telephone/Fax: Tel: (717) 787-6527, Fax: (717) 772-8282

Cost/terms: \$35

Description: This video presentation shows the placement of erosion control fabric in a drainage ditch (AV#00251).

Target audience: Construction managers, engineers

Pipe Placement

Product: Videocassette (9 min.)

Date produced: 1989

Source: Pennsylvania Department of Transportation

Contact: Pennsylvania Department of Transportation Employees Library, Forum Place, 555 Walnut St., 8th Floor, Harrisburg, PA 17101-1900

Telephone/Fax: Tel: (717) 787-6527, Fax: (717) 772-8282

Cost/terms: \$35

Description: This videocassette describes the required labor, equipment and materials necessary for successful pipe placement operation. It examines the basic areas to consider when installing pipe, such as location, size, grade, excavation, bedding, setting the pipe, backfilling, and end treatment (AV#00898).

Target audience: Supervisors, work crews

Scrap Tire Utilization Technologies

Product: Manual

Date produced: 1993

Source: National Asphalt Pavement Association (NAPA)

Contact: NAPA, 5100 Forbes Blvd., Lanham, MD 20706

Telephone/Fax: Tel: (301) 731-4748, Fax: (301) 731-4621

E-mail/Other: E-mail: napa@hotmix.org, Web Site: <http://www.hotmix.org>

Cost/terms: free

Description: This publication is designed to

assist those responsible for assessing options and finding solutions for the problems of tire disposal by providing a comparison of the current uses that have the potential for substantially reducing the scrap tire problem. Each technology is evaluated using engineering feasibility and economic analysis. Potential environmental implications are also considered (IS-116).

Target audience: General

Vegetation Management Workshop

Product: Course Materials

Date produced: 1991

Source: North Carolina T² Program

Contact: James B. Martin, Associate Director for Programs, Institute for Transportation Research and Education, North Carolina State University, Campus Box 8601, Raleigh, NC 27695-8601

Telephone/Fax: Tel: (919) 515-8033, Fax: (919) 515-8898

Cost/terms: Free loan; may duplicate

Description: This course reviews vegetation programs and introduces new technologies for vegetation management.

Target audience: City managers, planners, roadside maintenance personnel

We All Live Downstream

Product: Videocassette

Date produced: 1996

Source: Oregon State University

Contact: Steve Dodrill, Extension and Experiment Station Communications, Oregon State University, 422 Kerr Administrative Services, Corvallis, OR 97331

Telephone/Fax: Tel: (541) 737-0803

Cost/terms: \$30

Description: This video examines urban and rural runoff and the resulting problems it creates for surface water and groundwater. Pollution from non-point sources, including farms, forests, city streets, construction sites, mines and septic systems, along with the implications of the country's growing population, are examined.

Target audience: Local government officials

Equipment



Backhoe Loader Maintenance and Transport

Product: Videocassette (9 min.)

Date produced: 1992

Source: Video Information System Training Associates, Inc. (VISTA)

Contact: Ray Peterson, Director of Program Development, VISTA, 525 Milwaukee Ave., P.O. Box 247, Burlington, WI 53105
Telephone/Fax: Tel: (800) 942-2886

Cost/terms: \$59.95

Description: The lessons in this video are taken from real-life situations and will help the operator avoid serious injury or making costly mistakes during maintenance or transport.

Target audience: Equipment operators, mechanics

Backhoe Loader Pre-Start Inspection

Product: Videocassette (12 min.)

Date produced: 1992

Source: Video Information System Training Associates, Inc. (VISTA)

Contact: Ray Peterson, Director of Program Development, VISTA, 525 Milwaukee Ave., P.O. Box 247, Burlington, WI 53105
Telephone/Fax: Tel: (800) 942-2886

Cost/terms: \$64.95

Description: This video provides an organized way to check out the equipment before putting it to work.

Target audience: Equipment operators

Backhoe Loader Safe Operating Techniques

Product: Videocassette (14 min.)

Date produced: 1992

Source: Video Information System Training Associates, Inc. (VISTA)

Contact: Ray Peterson, Director of Program

Development, VISTA, 525 Milwaukee Ave., P.O. Box 247, Burlington, WI 53105

Telephone/Fax: Tel: (800) 942-2886

Cost/terms: \$74.95

Description: This video provides tips on how to operate a

backhoe loader smoothly and safely in a variety of work conditions with several different attachments.

Target audience: Equipment operators

Backing: You Owe It to Yourself

Product: Videocassette (10 min.)

Source: Pennsylvania Department of Transportation

Contact: Pennsylvania Department of Transportation Employees Library, Forum Place, 555 Walnut St., 8th Floor, Harrisburg, PA 17101-1900

Telephone/Fax: Tel: (717) 787-6527, Fax: (717) 772-8282

Cost/terms: \$35

Description: This videocassette familiarizes equipment operators with proper backing procedures. It outlines proper procedures for backing methods that reduce backing accidents (AV#00112).

Target audience: Equipment operators, foremen

Basic Equipment Operation Series

Product: Instructor's guides

Date produced: 1992-1993

Source: Louisiana T² Program

Contact: Louisiana Transportation Research Center, 4101 Gourrier Ave., Baton Rouge, LA 70808

Telephone/Fax: Tel: (504) 767-9117, Fax: (504) 767-9156

E-mail/Other: E-mail: laltap@ltrc.lsu.edu

Cost/terms: Free six week loan for public

agencies/may duplicate; \$5 for private/may not duplicate

Description: Each of these two-part guides covers basic on-the-job training, safe operating procedures and verification checklist for the operator. The various types of equipment covered include aerial ladder, asphalt distributor, bucket trucks, digger derrick, dump truck, lowboy, motor grader and roller.
Target audience: Equipment operators

Basic Forklift Principles

Product: Course Materials, Videocassette (14 min.)

Date produced: 1992

Source: Video Information System Training Associates, Inc. (VISTA)

Contact: Ray Peterson, Director of Program Development, VISTA, 525 Milwaukee Ave., P.O. Box 247, Burlington, WI 53105
Telephone/Fax: Tel: (800) 942-2886

Cost/terms: \$395, seven-day rental \$125. Includes facilitator's manual, 10 participant manuals and post-tests. Additional sets of participant manuals and post-tests are available at \$2 a set.

Description: These training materials cover different kinds of forklifts and their designated uses, and the lifting principle.

Target audience: Forklift operators

Conveyor Maintenance Safety (Aggregate Operations)

Product: Videocassette (14 min.)

Date produced: 1993

Source: Video Information System Training Associates, Inc. (VISTA)

Contact: Ray Peterson, Director of Program Development, VISTA, 525 Milwaukee Ave., P.O. Box 247, Burlington, WI 53105
Telephone/Fax: Tel: (800) 942-2886

Cost/terms: \$75

Description: This video will help employees understand how to avoid the dangers of working with head pulleys, tail pulleys, carrier rollers, drive motors and automatic tensioning devices.

Target audience: Aggregate operators

Cooling System Maintenance for Diesel Equipment

Product: Videocassette (17 min.)

Source: Pennsylvania Department of Transportation

Contact: Pennsylvania Department of Transportation Employees Library, Forum Place, 555 Walnut St., 8th Floor, Harrisburg, PA 17101-1900

Telephone/Fax: Tel: (717) 787-6527, Fax: (717) 772-8282

Cost/terms: \$35

Description: This videocassette is a follow-up to the standards preventive maintenance inspection. The program focuses on the use of new Pennsylvania Department of Transportation pre-mixed anti-freeze solution designed for diesel equipment (AV#00794).

Target audience: Supervisors, work crews

Crane Setup for Safety

Product: Course Materials, Videocassette (18 min.)

Date produced: 1993

Source: Crane Institute of America

Contact: Ray Peterson, Director of Program Development, VISTA, 525 Milwaukee Ave., P.O. Box 247, Burlington, WI 53105
Telephone/Fax: Tel: (800) 942-2886

Cost/terms: \$495, seven-day rental \$125

Description: These materials demonstrate the critical points of safe operation, including setting the crane up on firm level ground; using hardwood mats or blocking under outriggers; avoiding setup in hazardous areas; using ropes or barricades to prevent entry into the lift area; inspecting the setup and the crane; and understanding how the forces on the ground shift and can create unanticipated hazards.

Target audience: Equipment operators

Crawler Excavator Maintenance and Transport

Product: Videocassette (12 min.)

Date produced: 1993

Source: Video Information System Training Associates, Inc. (VISTA)

Contact: Ray Peterson, Director of Program Development, VISTA, 525 Milwaukee Ave.,

P.O. Box 247, Burlington, WI 53105

Telephone/Fax: Tel: (800) 942-2886

Cost/terms: \$69.95

Description: This video provides safety tips to help operators, mechanics and truck drivers avoid painful injuries and expensive downtime.

Target audience: Truck drivers, mechanics

Crawler Excavator Pre-Start Inspection

Product: Videocassette (13 min.)

Date produced: 1993

Source: Video Information System Training Associates, Inc. (VISTA)

Contact: Ray Peterson, Director of Program Development, VISTA, 525 Milwaukee Ave., P.O. Box 247, Burlington, WI 53105

Telephone/Fax: Tel: (800) 942-2886

Cost/terms: \$74.95

Description: This video will instruct operators what to look for in a pre-start inspection.

Target audience: Equipment operators

Crawler Excavator Safe Operating Techniques

Product: Videocassette (18 min.)

Date produced: 1993

Source: Video Information System Training Associates, Inc. (VISTA)

Contact: Ray Peterson, Director of Program Development, VISTA, 525 Milwaukee Ave., P.O. Box 247, Burlington, WI 53105

Telephone/Fax: Tel: (800) 942-2886

Cost/terms: \$84.95

Description: This video demonstrates safe operating techniques to use in sewer main-line work, road construction in heavy traffic, clinging to a mountainside, taking down a bridge at night and working in a scrap operation.

Target audience: Equipment operators

Equipment Operation: Truck-Mounted Excavator Series

Product: Course Materials

Date produced: 1994

Source: Louisiana T² Program

Contact: Louisiana Transportation Research Center, 4101 Gourrier Ave., Baton Rouge, LA 70808

Telephone/Fax: Tel: (504) 767-9117, Fax: (504) 767-9156

E-mail/Other: E-mail: laltap@ltrc.lsu.edu

Cost/terms: One copy free for public agencies/may duplicate; \$5 for private/may not duplicate

Description: This four-part series includes the following: Gradall Introduction; Gradall Start Up and Operation; Gradall Operation of Upperstructure; and Gradall General Maintenance.

Target audience: Equipment operators

Grader Operator Training Manual

Product: Manual

self-study text

Date produced: 1996

Source: Adapted from Nebraska T² Program

Contact: Peter Coughlan, Director, Maine Local Roads Center, Maine DOT Technical Services Division, 16 State House Station, Augusta, ME 04333-0016

Telephone/Fax: Tel: (207) 287-2152, Fax: (207) 287-3292

E-mail/Other: E-mail:

peter.coughlan@state.me.us

Cost/terms: Free to T² Centers, \$25 to all others

Description: This manual is used in Maine's "hands-on" motor grader operator training program. It describes the anatomy of a good road (paved or unpaved) dust control, erosion control, grader preventive maintenance, safety procedures, culvert design guidelines, grader operation, use of a hand pop level and determining the cost of lost gravel.

Target audience: Municipal and public works officials, foremen, operators

Grader Operator Training Manual

Product: Course Materials

Date produced: 1993

Source: Nebraska T² program

Contact: Peter Coughlan, Director, Maine Local Roads Center, Maine DOT Technical Services Division, 16 State House Station, Augusta, ME 04333-0016

Telephone/Fax: Tel: (207) 287-2152, Fax: (207) 287-3292

E-mail/Other: E-mail:

peter.coughlan@state.me.us

Cost/terms: Free to T² Centers, \$25 to all others, may duplicate with proper credits

Description: This manual is used in Maine's hands-on motor grader operator training program. It describes the anatomy of a good road, dust control, erosion control, grader operation, preventive maintenance, safety procedures, culvert design guidelines, use of a hand pop level and determining the cost of lost gravel.

Target audience: Municipal and public works personnel

Hand Signal Communication (Mobile Crane)

Product: Course Materials
Videocassette (18 min.)

Date produced: 1994

Source: Crane Institute of America

Contact: Ray Peterson, Director of Program Development, VISTA, 525 Milwaukee Ave., P.O. Box 247, Burlington, WI 53105
Telephone/Fax: Tel: (800) 942-2886

Cost/terms: \$495, seven-day rental \$125

Description: Hand Signal Communication shows how to properly use mobile crane hand signals effectively and accurately. Course materials include a post-viewing test.

Target audience: Equipment operators

Hauling Hot-Mix Asphalt

Product: Videocassette

Date produced: 1994

Source: National Asphalt Pavement Association (NAPA)

Contact: NAPA, 5100 Forbes Blvd., Lanham, MD 20706

Telephone/Fax: Tel: (301) 731-4748, Fax: (301) 731-4621

E-mail/Other: E-mail: napa@hotmix.org, Web Site: <http://www.hotmix.org>

Cost/terms: NAPA members \$10, nonmembers \$13; discounts for government agencies and educational institutions, and for quantity

Description: This instructional video on the

proper techniques to load, haul and dump hot-mix asphalt also includes informal tips on truck safety and inspection (TAS-19).

Target audience: Truck drivers

Lockout/Tagout of Energy Sources

Product: Course Materials, Videocassette (20 min.)

Date produced: 1993

Source: Video Information System Training Associates, Inc. (VISTA)

Contact: Ray Peterson, Director of Program Development, VISTA, 525 Milwaukee Ave., P.O. Box 247, Burlington, WI 53105
Telephone/Fax: Tel: (800) 942-2886

Cost/terms: \$495, seven-day rental \$125.

Description: These training materials discuss the hazards associated with uncontrolled energy, when to lock and tag equipment and machine controls, procedures involved in equipment shutdown and isolation, the safe control of stored energy and step-by-step procedures for lockout/tagout procedures.

Target audience: Equipment operators

Maintenance Welding Series: General Welding Safety and Tank Repair; Gas Welding and Metal Identification; Arc Welding

Product: 3 Videocassettes (3 hrs. 9 min.)

Date produced: 1994

Source: Michigan LTAP

Contact: Michigan LTAP, Michigan Technological University, 1400 Townsend Dr., Houghton, MI 49931-1295

Telephone/Fax: Tel: (906) 487-2102, Fax: (906) 487-3409

E-mail/Other: E-mail: tlmcninc@mtu.edu

Cost/terms: Free loan or 4 sets for \$100

Description: The Welding Safety section covers fire hazards, hazard prevention, extinguishing fires, body and eye protection. The Tank Repair section explains various non-welding methods of tank repair and the proper procedure for the dangerous task of welding or cutting a tank. The Gas Welding section explains the proper maintenance of gas welding equipment and regular setup. Demonstrates techniques for cutting various

types of metal stock, fusion welding and brazing. The Metal Identification section demonstrates metal identification using chemicals, flame or the spark test. The Arc Welding section explains how an arc welder works, welder setup and special safety issues. Describes the various electrodes and their uses.

Target audience: Equipment maintenance personnel, supervisors and safety personnel

Municipal Equipment Management System (MEMS)

Product: Course Materials

Date produced: 1993

Source: New Hampshire T² program

Contact: Peter Coughlan, Director, Maine Local Roads Center, Maine DOT Technical Services Division, 16 State House Station, Augusta, ME 04333-0016

Telephone/Fax: Tel: (207) 287-2152, Fax: (207) 287-3292

E-mail/Other: E-mail: peter.coughlan@state.me.us

Cost/terms: Free to T² Centers, \$25 to all others, may duplicate with proper credits

Description: This is a software program adapted from the New Hampshire T² center. This program is designed for small towns and cities to assist them in managing their equipment and fleets.

Target audience: Managers, public works directors, foremen

Operating a Forklift Safely

Product: Course Materials, Videocassette (17 min.)

Date produced: 1991

Source: Video Information System Training Associates, Inc. (VISTA)

Contact: Ray Peterson, Director of Program Development, VISTA, 525 Milwaukee Ave., P.O. Box 247, Burlington, WI 53105

Telephone/Fax: Tel: (800) 942-2886

Cost/terms: \$450, seven-day rental \$125.

Description: This program shows how to determine the safe lifting capacity, conduct a pre-operation inspection, operate a forklift and use battery and propane-operated units.

Target audience: Equipment operators

Overhead Crane Safety

Product: Course Materials
Videocassette (18 min.)

Date produced: 1993

Source: Crane Institute of America

Contact: Ray Peterson, Director of Program Development, VISTA, 525 Milwaukee Ave., P.O. Box 247, Burlington, WI 53105

Telephone/Fax: Tel: (800) 942-2886

Cost/terms: \$495, seven-day rental \$125

Description: This video provides an overview of the roles and responsibilities of supervisors, operators, riggers and signal persons; pre-operational and periodic inspection requirements; safe operating procedures; requirements for operators; and hand signals.

Target audience: Equipment operators

Paver Operations for Quality

Product: Manual

Date produced: 1996

Source: National Asphalt Pavement Association (NAPA)

Contact: NAPA, 5100 Forbes Blvd., Lanham, MD 20706

Telephone/Fax: Tel: (301) 731-4748, Fax: (301) 731-4621

E-mail/Other: E-mail: napa@hotmix.org, Web Site: <http://www.hotmix.org>

Cost/terms: NAPA members \$4, nonmembers \$8

Description: This publication discusses the effect paver operations have on the quality of HMA pavements. Job planning, the paver, materials, paver operating techniques, troubleshooting, mat blemishes, pavement preparation and job descriptions for paving personnel are discussed (IS-125).

Target audience: Superintendents, paver operators, foremen, inspectors

Paving and Compaction Training

Product: Videocassette (1 hr., 43 min.)

Date produced: 1994

Source: Video University Productions, Inc.

Contact: Video University Productions, Inc., 3501 N. Happy Hollow Rd., Independence, MO 64058

Telephone/Fax: Tel: (800) 927-8444

Cost/terms: \$89

Description: This video covers basic paving procedures including start-up procedures, general information on tractor and screed, adjusting tow-points, screed height, and manual and automatic controls.

Target audience: Operations personnel, supervisors

Power Operations for Quality

Product: Manual

Date produced: 1996

Source: National Asphalt Pavement Association (NAPA)

Contact: NAPA, 5100 Forbes Blvd., Lanham, MD 20706

Telephone/Fax: Tel: (301) 731-4748, Fax: (301) 731-4621

E-mail/Other: E-mail: napa@hotmail.org, Web Site: <http://www.hotmix.org>

Cost/terms: NAPA members \$4, nonmembers \$8

Description: This publication discusses the effect paver operations have on the quality of HMA pavements. Job planning, the paver, materials, paver operating techniques, troubleshooting, mat blemishes, pavement preparation and job descriptions for paving personnel are discussed (IS-125).

Target audience: Superintendents, paver operators, foremen, inspectors

Pre-Operational Inspection (Mobile Crane)

Product: Course Materials, Videocassette (18 min.)

Date produced: 1994

Source: Crane Institute of America

Contact: Ray Peterson, Director of Program Development, VISTA, 525 Milwaukee Ave., P.O. Box 247, Burlington, WI 53105

Telephone/Fax: Tel: (800) 942-2886

Cost/terms: \$495, seven-day rental \$125

Description: This video shows a step-by-step inspection procedure.

Target audience: Equipment operators, supervisors

Preventive Maintenance Around the Vehicle

Product: Videocassette (9 min.)

Date produced: 1986

Source: Pennsylvania Department of Transportation

Contact: Pennsylvania Department of Transportation Employees Library, Forum Place, 555 Walnut St., 8th Floor, Harrisburg, PA 17101-1900

Telephone/Fax: Tel: (717) 787-6527, Fax: (717) 772-8282

Cost/terms: \$35

Description: This is part two of a series of videotapes describing preventive maintenance procedures for single dump trucks. The videotape emphasizes around-the-vehicle preventive maintenance and it is especially of interest to mechanics (AV#00372).

Target audience: Dump truck operators and mechanics

Preventive Maintenance In-Cab

Product: Videocassette (14 min.)

Date produced: 1986

Source: Pennsylvania Department of Transportation

Contact: Pennsylvania Department of Transportation Employees Library, Forum Place, 555 Walnut St., 8th Floor, Harrisburg, PA 17101-1900

Telephone/Fax: Tel: (717) 787-6527, Fax: (717) 772-8282

Cost/terms: \$35

Description: This is part one of a series of videotapes describing preventive maintenance procedures for single dump trucks. The videotape emphasizes in-cab preventive maintenance and it is of interest to mechanics and drivers (AV#00371).

Target audience: Dump truck operators and mechanics

Preventive Maintenance Under the Hood

Product: Videocassette (10 min.)

Date produced: 1986

Source: Pennsylvania Department of Transportation

Contact: Pennsylvania Department of Transportation Employees Library, Forum Place, 555 Walnut St., 8th Floor, Harrisburg, PA 17101-1900

Telephone/Fax: Tel: (717) 787-6527, Fax: (717) 772-8282

Cost/terms: \$35

Description: This is part three of a series of videotapes describing preventive maintenance procedures for single dump trucks. The videotape emphasizes under the hood preventive maintenance and it is of interest to mechanics and drivers (AV#00373).

Target audience: Dump truck operators and mechanics

Preventive Maintenance Under the Vehicle

Product: Videocassette (10 min.)

Date produced: 1986

Source: Pennsylvania Department of Transportation

Contact: Pennsylvania Department of Transportation Employees Library, Forum Place, 555 Walnut St., 8th Floor, Harrisburg, PA 17101-1900

Telephone/Fax: Tel: (717) 787-6527, Fax: (717) 772-8282

Cost/terms: \$35

Description: This is part four of a series of videotapes describing preventive maintenance procedures for single dump trucks. The videotape emphasizes under the vehicle preventive maintenance and it is of interest to mechanics and drivers (AV#00374).

Target audience: Dump truck operators and mechanics

Roller Operations for Quality

Product: Manual

Date produced: 1996

Source: National Asphalt Pavement Association (NAPA)

Contact: NAPA, 5100 Forbes Blvd., Lanham, MD 20706

Telephone/Fax: Tel: (301) 731-4748, Fax: (301) 731-4621

E-mail/Other: E-mail: napa@hotmix.org, Web Site: <http://www.hotmix.org>

Cost/terms: NAPA members \$6, nonmembers \$12

Description: This document focuses on the compaction process to ensure the best possible conditions are provided for the roller operations to meet the pavement density specifications. Key factors involved in providing a high quality, smooth road surface which result in longer lasting HMA pavements are described (IS-121).

Target audience: Superintendents, roller operators, foremen, inspectors

Rubber Tire Roller Calibration

Product: Videocassette (16 min.)

Date produced: 1991

Source: Pennsylvania Department of Transportation

Contact: Pennsylvania Department of Transportation Employees Library, Forum Place, 555 Walnut St., 8th Floor, Harrisburg, PA 17101-1900

Telephone/Fax: Tel: (717) 787-6527, Fax: (717) 772-8282

Cost/terms: \$35

Description: This videotape covers equipment calibration and further enhances the quality of seal coat and surface treatment projects (AV#01394).

Target audience: Supervisors and work crews

Safe Conveyor Operation

Product: Videocassette (16 min.)

Date produced: 1993

Source: Video Information System Training Associates, Inc. (VISTA)

Contact: Ray Peterson, Director of Program Development, VISTA, 525 Milwaukee Ave., P.O. Box 247, Burlington, WI 53105

Telephone/Fax: Tel: (800) 942-2886

Cost/terms: \$75

Description: This video will help people who work around conveyors do their job safely. Includes interviews with experienced aggregate operation supervisors.

Target audience: Aggregate operators

Safety Six

Product: Course Materials
Videocassette

Date produced: 1993

Source: Trans-360

Contact: Ray Peterson, Director of Program Development, VISTA, 525 Milwaukee Ave., P.O. Box 247, Burlington, WI 53105
Telephone/Fax: Tel: (800) 942-2886
Cost/terms: \$150. Workbooks \$15 each. Includes facilitator's manual, 10 participant manuals, 10 post-tests. Additional sets of participant manuals and post-tests are available at \$2 a set

Description: Safety Six is a defensive driver training program for public works operators who drive vehicles in excess of 16,000 GVW. While the program features operators of trucks in public works situations, the safety and defensive driving principles apply to truck drivers in all types of businesses.

Target audience: Drivers of municipal trucks

Shadow of Safety: Truck Mounted Attenuator

Product: Videocassette (9 min.)

Date produced: 1989

Source: Pennsylvania Department of Transportation

Contact: Pennsylvania Department of Transportation Employees Library, Forum Place, 555 Walnut St., 8th Floor, Harrisburg, PA 17101-1900

Telephone/Fax: Tel: (717) 787-6527, Fax: (717) 772-8282

Cost/terms: \$35

Description: This videotape outlines methods for the operation of the truck mounted attenuator equipment shadow vehicle (AV#00950).

Target audience: Supervisors and work crews

Surface Treatment Equipment Calibration

Product: Videocassette (17 min.)

Date produced: 1991

Source: Pennsylvania Department of Transportation

Contact: Pennsylvania Department of Transportation

Employees Library, Forum Place, 555 Walnut St., 8th Floor, Harrisburg, PA 17101-1900

Telephone/Fax: Tel: (717) 787-6527, Fax: (717) 772-8282

Cost/terms: \$35

Description: This videotape covers equipment calibration and further enhances the quality of seal coat and surface treatment projects (AV#01393).

Target audience: Supervisors and work crews

Towing: You Owe It to Yourself Series

Product: Videocassette (10 min.)

Date produced: 1987

Source: Pennsylvania Department of Transportation

Contact: Pennsylvania Department of Transportation Employees Library, Forum Place, 555 Walnut St., 8th Floor, Harrisburg, PA 17101-1900

Telephone/Fax: Tel: (717) 787-6527, Fax: (717) 772-8282

Cost/terms: \$35

Description: This videotape outlines the proper procedures for hook-up, towing and disconnecting (AV#00569).

Target audience: Equipment operators

Transport Trailer Safety

Product: Course Materials

Videocassette (24 min.)

Date produced: 1994

Source: Video Information System Training Associates, Inc. (VISTA)

Contact: Ray Peterson, Director of Program Development, VISTA, 525 Milwaukee Ave., P.O. Box 247, Burlington, WI 53105
Telephone/Fax: Tel: (800) 942-2886

Cost/terms: \$49.95

Description: This video discusses the safe loading and attachment of tie-down chains and binders on a wide variety of equipment. Tag-along and fifth wheel trailers are used to demonstrate safety considerations for anyone doing this type of transport work.

Target audience: Equipment operators

Wheel Loader Operating Techniques

Product: Videocassette (23 min.)

Date produced: 1993

Source: Video Information System Training Associates, Inc. (VISTA)

Contact: Ray Peterson, Director of Program Development, VISTA, 525 Milwaukee Ave., P.O. Box 247, Burlington, WI 53105
Telephone/Fax: Tel: (800) 942-2886

Cost/terms: \$75

Description: This video provides examples of operating situations such as how to recover from a slide on a side hill, safe road travel, trailer transport techniques, undercutting a bank and night operations.

Target audience: Equipment operators

Wheel Loader Walk-Around and Introduction

Product: Videocassette (15 min.)

Date produced: 1993

Source: Video Information System Training Associates, Inc. (VISTA)

Contact: Ray Peterson, Director of Program Development, VISTA, 525 Milwaukee Ave., P.O. Box 247, Burlington, WI 53105
Telephone/Fax: Tel: (800) 942-2886

Cost/terms: \$75

Description: This video shows operators what to look for and why, as well as what can go wrong if they miss something.

Target audience: Equipment operators

Working Crane Near Power Lines (Mobile Cranes)

Product: Course Materials
Videocassette (28 min.)

Date produced: 1994

Source: Crane Institute of America

Contact: Ray Peterson, Director of Program Development, VISTA, 525 Milwaukee Ave., P.O. Box 247, Burlington, WI 53105
Telephone/Fax: Tel: (800) 942-2886

Cost/terms: \$495, seven-day rental \$125.

Description: These course materials show how to set up and safely work around energized power lines.

Target audience: Equipment operators

Information Management



AASHTO Publications

Product: Catalog

Date produced: 1996

Source: AASHTO

Contact: AASHTO, 444 North Capitol St., NW, Suite 249, Washington, DC 20001

Telephone/Fax: Tel: (888) 227-4860, Fax: (800) 525-5562

Cost/terms: Free

Description: Contains technical publications, manuals and specifications for bridges and structures, design and traffic, maintenance, materials, and planning and environment.

Target audience: Supervisors

Advanced TRANSYT-7F Training Course

Product: Course

Date produced: 1995

Source: Transportation Research Center, University of Florida

Contact: Charles E. Wallace, Director, Transportation Research Center, University of Florida, 512 Weil Hall, P.O. Box 116585, Gainesville, FL 32611-6585

Telephone/Fax: Tel: (352) 392-0378, Fax: (352) 392-3224

E-mail/Other: E-mail: t2@ce.ufl.edu

Cost/terms: Ask contact

Description: This comprehensive three-day course covers advanced applications of TRANSYT-7F. Extensive use of exercises ensure detailed coverage of many advanced applications. The work space for evaluating signal timing (west) package is used to facilitate comparative analysis.

Target audience: Traffic engineers and transportation planners doing detailed analysis

Arterial Analysis Package Training Course

Product: Course

Date produced: 1991

Source: Transportation Research Center, University of Florida

Contact: Charles E. Wallace, Director, Transportation Research Center, University of Florida, 512 Weil Hall, P.O. Box 116585, Gainesville, FL 32611-6585

Telephone/Fax: Tel: (352) 392-0378, Fax: (352) 392-3224

E-mail/Other: E-mail: t2@ce.ufl.edu

Cost/terms: Ask contact

Description: This comprehensive training course in the use of the new Arterial Analysis Package (AAP) includes the package's component programs: PASSER II-90 and TRANSYT-7F. The course covers the operations of the AAP, data coding, modeling details of the components, and applications guidelines. The course also covers signal timing elements and implementation guidelines.

Target audience: Traffic engineers, transportation planners

Bureau of Transportation Statistics Services and Products Catalog

Product: Catalog

Date produced: 1996

Source: Bureau of Transportation Statistics (BTS)

Contact: BTS, 400 Seventh St., SW, Washington, DC 20590

Telephone/Fax: Tel: (202) 366-DATA, Fax: (202) 366-3640

E-mail/Other: E-mail: info@bts.gov, Web Site:

<http://www.bts.gov>

Cost/terms: Free

Description: This catalog contains a list and brief description of the services and products available from the Bureau of Transportation Statistics, such as the Statistical Information Line, the Fax-On-Demand line, printed products and electronic products.

Target audience: Supervisors

ROADWARE Version 6.0

Product: Software

Date produced: 1996

Source: Wisconsin Transportation Information Center (TIC)

Contact: Mercy Ranum, Program Assistant, Wisconsin TIC, University of Wisconsin-Madison, 432 N. Lake St., Room 725A, Madison, WI 53706

Telephone/Fax: Tel: (608) 262-0422, Fax: (608) 263-3160

Cost/terms: Software, documentation, and one copy of the Asphalt, Concrete and Gravel PASER Manuals are \$25

Description: This software implements PASER pavement rating system for paved and unpaved roads. Includes inventory and a PASER condition rating for each road segment. Program projects pavement condition for various repair programs and budgets over a five year period. Allows user to set deterioration rates, pavement repair and rehabilitation costs, yearly budgets, and to select projects and see the results of that selection. Variety of reports, graphs and exportable files created by the software can be used for presentation to elected officials and the public.

Target audience: Local road personnel

Surveying Methods for Local Highway Departments

Product: Manual

Date produced: 1994

Source: Cornell Local Roads Program (CLRP)

Contact: Amy Dreher, Resource and Information Specialist, CLRP, 416 Riley-Robb Hall, Ithaca, NY 14853-5701

Telephone/Fax: Tel: (607) 255-8033, Fax: (607) 255-4080

E-mail/Other: E-mail: clrp@cornell.edu

Cost/terms: Free to New York State highway and public works officials; \$5 to others

Description: This course is designed to teach the basic use of the hand level, carpenter's level and rule; the basic techniques for measuring super elevations; measuring horizontal distances; crowning a road; checking a grade; taking elevations on each end of the culvert; and determining pipe length.

Target audience: Highway officials and public works personnel

TRANSYT-7F Training Course

Product: Course

Date produced: 1992

Source: Transportation Research Center, University of Florida

Contact: Charles E. Wallace, Director, Transportation Research Center, University of Florida, 512 Weil Hall, P.O. Box 116585, Gainesville, FL 32611-6585

Telephone/Fax: Tel: (352) 392-0378, Fax: (352) 392-3224

E-mail/Other: E-mail: t2@ce.ufl.edu

Cost/terms: Ask contact

Description: This comprehensive three-day (adjustable) training course in the use of the TRANSYT-7F, release 7, model covers details of the TRANSYT simulation and optimization algorithms and operation of the package, data coding, and interpretation of results. The course also covers signal timing, elements and implementation guidelines.

Target audience: Traffic engineers, transportation planners

Management and Training



Bidding Documents for Small Road Projects

Product: Sample documents

Date produced: 1996

Source: Wisconsin Transportation Information Center (TIC)

Contact: Mercy Ranum, Program Assistant, Wisconsin TIC, University of Wisconsin-Madison, 432 N. Lake St., Room 725A, Madison, WI 53706

Telephone/Fax: Tel: (608) 262-0422, Fax: (608) 263-3160

Cost/terms: Single copies to T² Centers no charge

Description: Sample documents for simple asphalt paving and sealcoat projects. Packet includes brief explanation with objectives, bid schedule, agency check list, official notice, specifications, proposal form, notice of award, agreement and change order.

Target audience: Local road personnel involved in bidding projects

Getting the Good Buy

Product: Videocassette (43 min.)

Date produced: 1991

Source: Pennsylvania Department of Transportation

Contact: Pennsylvania Department of Transportation Employees Library, Forum Place, 555 Walnut St., 8th Floor, Harrisburg, PA 17101-1900

Telephone/Fax: Tel: (717) 787-6527, Fax: (717) 772-8282

Cost/terms: \$35

Description: This videocassette provides an overview of the procedures to follow and the pitfalls to avoid in local bidding for purchas-

ing equipment, materials, or services (AV#01368).

Target audience: Managers

Getting Your Message Understood: Communicating with

Decision-Makers, Citizens and the Media

Product: Course Materials

Date produced: 1991

Source: North Carolina T² Program

Contact: James B. Martin, Associate Director for Programs, Institute for Transportation Research and Education, North Carolina State University, Campus Box 8601, Raleigh, NC 27695-8601

Telephone/Fax: Tel: (919) 515-8033, Fax: (919) 515-8898

Cost/terms: Free loan; may duplicate

Description: This course teaches the fundamentals of verbal, nonverbal and written communications and how to apply these fundamentals to become a more effective communicator with decision-makers, citizens and peers. This course also covers specific strategies for providing concise information to print and broadcast media.

Target audience: Supervisors

Idea Store Series

Product: Videocassette series

Source: Pennsylvania Department of Transportation

Contact: Pennsylvania Department of Transportation Employees Library, Forum Place, 555 Walnut St., 8th Floor, Harrisburg, PA 17101-1900

Telephone/Fax: Tel: (717) 787-6527, Fax: (717) 772-8282

Cost/terms: \$35

Description: This series, which describes ideas from municipalities across the nation on ways to make jobs safer, easier, or better, includes the following:

- Idea Store (1989, 8 min.) - Features ideas on leveling roads, a special hand level, snow plow blade storage, a sign identification decal, and standard plans for park benches and other street furniture (AV#00786);
- Idea Store #2 (1989, 13 min.) - Features ideas on innovative tools, tips on maintaining traffic control devices, information flyers, slips for changing motor grader blades, and devices to scare away beavers (AV#00867);
- Idea Store #3 (1989, 9 min.) - Features a plow blade lifter, grader daily maintenance, a spreader box, and retaining walls (AV#01041);
- Idea Store #4 (1990, 10 min.) - Features grates for cross drains, anti-snow/slush boards, a cross conveyor, a window guard using discarded tires, and a portable "road closed" barricade (AV#01160);
- Idea Store #5 (1991, 11 min.) - Features the "horrible" hard hat, proper tire inflation, safety grams, proper signing and an "adopt-a-sign" program (AV#01250);
- Idea Store #6 (1991, 17 min.) - Features wildflowers, adopt-a-highway programs, light cages, fabricated posts, Roads Scholar programs, signs, a brainstorming box, and a safety packet (AV#01390);
- Idea Store #7 (1992, 10 min.) - Features dump truck air foil, better cylinder wrench, curb scrapper, timber bridge information, and Delaware/Chester Public Works Association ideas (AV#01570);
- Idea Store #8 (1993, 10 min.) - Features medical alert and medical information labels, how to avoid getting plowed on Montana's highways program, the fuel truck/welding marking light, and dismounting the wing snow plow (AV#01705).

Target audience: Supervisors and work crews

Ideas That Make a Difference Series

Product: Videocassette series

Source: Pennsylvania Department of Transportation

Contact: Pennsylvania Department of Transportation Employees Library, Forum Place, 555 Walnut St., 8th Floor, Harrisburg, PA 17101-1900

Telephone/Fax: Tel: (717) 787-6527, Fax: (717) 772-8282

Cost/terms: \$35

Description: This is a series of videotapes covering ideas from the field, including the following:

- Ideas That Make a Difference #1 (1984, 10 min.) - Features barrier cleaning, a hose cover, a mud flap, barrier outside equipment cleaning procedure, a non-skid paint, edge of road patching, and an oil distributor self-cleaning hose (AV#00129);
- Ideas That Make a Difference #2 (1984, 13 min.) - Describes winter season training, double-tipped blades, a high-visibility door lighted shift reminder, an accountability board, and a hydraulic tester (AV#00137);
- Ideas That Make a Difference #3 (1984, 13 min.) - Features a quality circle philosophy, a baby seat loan program, lifting collar post pounder, idea brainstorming, and a checklist for construction inspectors (AV#00168);
- Ideas That Make a Difference #4 (1984, 10 min.) - Features an information center, a plow blade rack, a modified paint gun, a truck bed modification, a project checklist, and a bridge deck (AV#00203);
- Ideas That Make a Difference #5 (1985, 12 min.) - Describes computer use, a roller lock, traffic truck tire pressure, and crew training (AV#00232);
- Ideas That Make a Difference #6 (1985, 13 min.) - Features a paint truck, plow modification, light bulb changing, idea submission, a bridge truck, and personal

- computer use (AV#00235);
- Ideas That Make a Difference #7 (1985, 14 min.) - Features a hot plate box, a training plan, a slab lifter, a band tightener, a spinner modification, a plain meter, and a pintle hook hitch (AV#00247);
 - Ideas That Make a Difference #8 (1985, 9 min.) - Features a magnetic assignment board, painting garage malls, Essicks roller to plow frame, a stream jenny arrangement, a truck with portable water tank and concrete saw, compressor truck modifications, tar buggy modifications, and garage-office area renovations (AV#00272);
 - Ideas That Make a Difference #9 (1986, 15 min.) - Features the "best darn lube truck modifications" in the state, anti-skid spreader modification, portable steps for truck servicing, a mirror maze, outdoor inspection bay, pizza-oven cold patch warmer, a roll-up tarp for trucks, and a rear-light cover for trucks (AV#00422);
 - Ideas That Make a Difference #10 (1987, 17 min.) - Features a hydraulically controlled post puller and work zone traffic control (AV#00516);
 - Ideas That Make a Difference #11 (1987, 11 min.) - Describes a sign gauge for an oil tank, an oil tank safety ladder, an aluminum step-up ladder, a protective shield, storage additions to an arrow board, a flexible baffle on a snow plow, boat rollers for air compressors, and color-coded pipes in garages (AV#00594);
 - Ideas That Make a Difference #12 (1988, 17 min.) - Features a portable battery tester, crimping, cutting and fitting hydraulic hoses, a safety light for an auger box, a portable boot cleaner, one post chevron installation, fork lift trailer hitching, and the snow fighting excavator (AV#00650);
 - Ideas That Make a Difference #13 (1988, 26 min.) - Features a portable F.L.O.C. unit, a spreader rack system, mounted cutting torches, truck bed material, truck mounted trouble light, and universal maintenance (AV#00779);
 - Ideas That make a Difference #14 (1990, 17 min.) - Features ideas from Tioga County, Penn. including a key chain, high visibility gloves, a chain box tire hoist, a post remover, a plow jack, pilot-lighting burner switch, tar buggy drain tanks, a PVC plug remover, and a dust collector (AV#01125);
 - Ideas That Make a Difference #15 (1990, 28 min.) - Features a clerical procedures manual, a benefits center, a snack bar, toluene waste blending and solvent recovery, dump truck night visibility, waste materials containment site, windshield brush guards, crew cab side mirror, spill prevention kits, a portable oil distributor, and wheel securing chokes (AV#01308);
 - Ideas That Make a Difference #16 (1991, 38 min.) - Features a rest room blood pressure kit, interagency cooperation on wetlands, additional parking spaces, employee involvement recognition stickers, a redesigned cap and bed for a survey truck, fuel truck safety rails and catwalk, a snow plow blade changing cart, a thermolay patching unit, and a berm box modification (AV#01392);
 - Ideas That Make a Difference #17 (1993) - Features operations of the sandblast hopper, mechanic's work steps, crew cab step bumper, snow plow quick connect coupler, spill containment pallet, and atthey belt loader-rebuilt chain (AV#01574).

Target audience: Supervisors and work crews

Indian Reservation Roads Program: Rules of the Game

Product: Manual

Date produced: 1996

Contact: Ron Hall, Manager, Tribal Technology Transfer & Training Program Colorado State University, Engineering Research Center, Room A329, Fort Collins, CO 80523
Telephone/Fax: Tel: (800) 262-7623, Fax: (970) 491-8334

E-mail/Other: E-mail:

rchall@vines.colostate.edu

Cost/terms: Free loan or \$20; may duplicate

Description: This two volume set of reference material is a compilation of laws and regulations related to the program and operations of the Indian Reservation Roads (IRR) Program by the Bureau of Indian Affairs (BIA). Includes the history of the IRR Program, funding allocation, P.I. 93-638 contract regulations, 23 USC, Single Audit Act regulations and relevant sections of the BIA manual.

Target audience: Tribal government officials

Just Another Job

Product: Videocassette (44 min.)

Date produced: 1989

Source: Pennsylvania Department of Transportation

Contact: Pennsylvania Department of Transportation Employees Library, Forum Place, 555 Walnut St., 8th Floor, Harrisburg, PA 17101-1900

Telephone/Fax: Tel: (717) 787-6527, Fax: (717) 772-8282

Cost/terms: \$35

Description: Videocassette and workbook describe the steps the department must pursue in programming, designing, letting, and constructing a project from its inception to its completion (AV#00821).

Target audience: Management

Leading and Building Your Team

Product: Manual

Date produced: 1991

Source: Cornell Local Roads Program (CLRP)

Contact: Amy Dreher, Resource and Information Specialist, CLRP, 416 Riley-Robb Hall, Ithaca, NY 14853-5701

Telephone/Fax: Tel: (607) 255-8033, Fax: (607) 255-4080

E-mail/Other: E-mail: clrp@cornell.edu

Cost/terms: Free to New York State highway and public works officials; \$5 to others

Description: This manual, developed for a course titled "Managing People," includes materials on the factors affecting human behavior, different types of human needs,

how a supervisor's assumptions affect leadership style, the difference between a work force and a team, the difference between a supervisor and a leader, hiring new team members and performance evaluations

Target audience: Supervisors

Management and Supervisory Skills Workshop

Product: Course Materials

Date produced: 1991

Source: North Carolina T²Program

Contact: James B. Martin, Associate Director for Programs, Institute for Transportation Research and Education, North Carolina State University, Campus Box 8601, Raleigh, NC 27695-8601

Telephone/Fax: Tel: (919) 515-8033, Fax: (919) 515-8898

Cost/terms: Free loan; may duplicate

Description: This course covers basic management and supervisory techniques that will assist the newly promoted manager/supervisor in planning, directing, motivating and making decisions in an efficient manner.

Target audience: Managers and supervisors

Managerial Skills for Transportation Engineers

Product: Course

Date produced: 1994

Source: Northwestern University Traffic Institute

Contact: Robert K. Seyfried, Director, Transportation Engineering, Northwestern University Traffic Institute

405 Church St., Evanston, IL 60204

Telephone/Fax: Tel: (800) 323-4011, (847)

491-5040, Fax: (847) 491-5270

E-mail/Other: Web Site: <http://www.nwu.edu/traffic>

Cost/terms: Cost available on request

Description: This workshop is designed to provide concepts and skills in management, along with specific techniques which will enable the transportation engineer/manager to perform in a more efficient and effective manner. The workshop covers important human resource factors, communication skills, project scheduling and management,

changing conditions in the workplace, relationships with political decision-makers and the public, and crisis management.

Target audience: Those who wish to tie managerial skills and the transportation engineering profession together

Presentation Skills for Transportation Professionals

Product: Course Materials

Date produced: 1991

Source: North Carolina T² Program

Contact: James B. Martin, Associate Director for Programs, Institute for Transportation Research and Education, North Carolina State University, Campus Box 8601, Raleigh, NC 27695-8601

Telephone/Fax: Tel: (919) 515-8033, Fax: (919) 515-8898

Cost/terms: Free loan; may duplicate

Target audience: This course is designed to teach the strategies needed to capture an audience's attention and get the desired results. Participants learn how to determine an audience's needs, beliefs and expectations; research and prepare effective presentation plans; project a confident image even with the most hostile audience; use nonverbal techniques that enhance rather than detract from the presentation material; and give a successful interview with the media.

Small Highway Department Management Using Principles of TQM

Product: Course

Date produced: 1995

Source: Cornell Local Roads Program (CLRP)

Contact: Amy Dreher, Resource and Information Specialist, CLRP, 416 Riley-Robb Hall, Ithaca, NY 14853-5701

Telephone/Fax: Tel: (607) 255-8033, Fax: (607) 255-4080

E-mail/Other: E-mail: clrp@cornell.edu

Cost/terms: Free to New York State highway and public works officials; \$5 to others

Description: This course is intended for recently elected or appointed town or village highway superintendents or public works officials who supervise a staff of up to 25 employees. Based on the Total Quality

Management (TQM) principles, this course covers the concepts of teamwork, budget management, scheduling activities, setting up snow and ice control operations and handling complaints.

Target audience: Highway and public works officials

So You're Gonna Make a Video

Product: Videocassette (23 min.)

Date produced: 1988

Source: Pennsylvania Department of Transportation

Contact: Pennsylvania Department of Transportation Employees Library, Forum Place, 555 Walnut St., 8th Floor, Harrisburg, PA 17101-1900

Telephone/Fax: Tel: (717) 787-6527, Fax: (717) 772-8282

Cost/terms: \$35

Description: This videotape provides an overview of all aspects of preparing a videocassette, from planning to completion, which will turn your next production into a successful training tool (AV#01391).

Target audience: Trainers and managers

Transportation Systems Management

Product: Course

Date produced: 1988 (updated 1992)

Source: Transportation Training Division, Texas

Engineering Extension Service (TTD TEEX)

Contact: Nelson Evans, Head, TTD TEEX, The Texas A & M University System, College Station, TX 77843-8000

Telephone/Fax: Tel: (409) 845-4457, Fax: (409) 862-4768

E-mail/Other: E-mail: trevans@teexnet.tamu.edu

Cost/terms: Available on request

Description: This course introduces low-cost, short-term, high-impact modifications to a community's transportation operations that make more efficient use of the available transportation systems.

Target audience: Technical personnel in traffic operations

Writing Skills for Transportation Professionals

Product: Course Materials

Date produced: 1991

Source: North Carolina T² Program

Contact: James B. Martin, Associate Director
for Programs, Institute for Transportation
Research and Education, North Carolina
State University, Campus Box 8601, Raleigh,
NC 27695-8601

Telephone/Fax: Tel: (919) 515-8033, Fax:
(919) 515-8898

Cost/terms: Free loan; may duplicate

Description: This course covers the specific
strategies needed to strengthen writing
skills; master the essentials for writing
reports, proposals, memos and letters,
overcome "writer's block;" edit technical
information effectively; and identify and
correct common problems of grammar and
punctuation.

Target audience: Transportation profession-
als

Materials



AEMA: Paving the Way to the 21st Century

Product: Videocassette (10 min.)

Source: Asphalt Emulsion Manufacturers Association (AEMA)

Contact: AEMA, 3 Church Circle, Suite 250, Annapolis, MD 21401

Telephone/Fax: Tel: (410) 267-0023, Fax: (410)

Cost/terms: \$10

Description: An introduction to asphalt emulsion manufacture and uses.

Target audience: Contractors, public officials

Asphalt Cold-Mix Manual

Product: Manual

Date produced: 1992

Source: Asphalt Institute

Contact: Ross Bentsen, Director of Education, Asphalt Institute, Research Park Drive, P.O. Box 14052, Lexington, KY 40512-4052

Telephone/Fax: Tel: (606) 288-4983

Cost/terms: \$16

Description: This manual contains guidelines for central plant mix and mixed-in-place construction of mixes utilizing asphalt emulsion or cutback asphalt. It also includes specifications for stockpile maintenance mixtures and cold mix design using the Marshall or modified Hveem mix design methods (MS-14).

Target audience: Pavement engineers

Asphalt Emulsion Spray Applications

Product: Videocassette (23 min.)

Date produced: 1986

Source: Asphalt Institute

Contact: Ross Bentsen, Director of Education, Asphalt Institute, Research Park Drive, P.O. Box 14052, Lexington, KY 40512-4052

Telephone/Fax: Tel: (606) 288-4983

Cost/terms: \$49

Description: This video describes and demonstrates what asphalt emulsion is; pavement surface treatments with asphalt emulsion and aggregates; the steps to be followed for optimal results from emulsion surface treatments; and the universal applicability of emulsion spray applications.

Target audience: Maintenance personnel

Asphalt Handbook

Product: Manual

Date produced: 1989

Source: Asphalt Institute

Contact: Ross Bentsen, Director of Education, Asphalt Institute, Research Park Drive, P.O. Box 14052, Lexington, KY 40512-4052

Telephone/Fax: Tel: (606) 288-4983

Cost/terms: \$33

Description: The Asphalt Handbook describes the uses of asphalt, including information on types of asphalt, mix designs, mixing facilities, paving, compaction, surface treatments, recycling, maintenance, structural design, various miscellaneous uses, and useful tables (MS-4).

Target audience: General

Asphalt in Hydraulics

Product: Manual

Date produced: 1976 (second edition)

Source: Asphalt Institute

Contact: Ross Bentsen, Director of Education, Asphalt Institute, Research Park Drive, P.O. Box 14052, Lexington, KY 40512-4052

Telephone/Fax: Tel: (606) 288-4983

Cost/terms: \$8

Description: Data for the guidance of those involved with the use of asphalt in the construction, maintenance and repair of

reservoirs, dams, holding ponds, swimming pools, sanitary landfills and similar structures (MS-12).

Target audience: Engineers, designers, maintenance personnel

Asphalt Maintenance Techniques

Product: Videocassette (1 hr., 25 min.)

Date produced: 1994

Source: Video University Productions, Inc.

Contact: Video University Productions, Inc., 3501 N. Happy Hollow Rd., Independence, MO 64058

Telephone/Fax: Tel: (800) 927-8444

Cost/terms: \$69

Description: This video covers a variety of maintenance techniques including chip seal, cutouts and repairs, tar seal, crack filling, striping, asphalt overlay and geotextiles.

Target audience: Operations personnel, supervisors

Asphalt Pocketbook of Useful Information

Product: Manual

Date produced: 1993

Source: Asphalt Institute

Contact: Ross Bentsen, Director of Education, Asphalt Institute, Research Park Drive, P.O. Box 14052, Lexington, KY 40512-4052

Telephone/Fax: Tel: (606) 288-4983

Cost/terms: \$9

Description: This is a pocket-size publication containing data on unloading tank cars, temperature-volume corrections for asphalt materials, and conversion tables for material requirements in road construction (MS-6).

Target audience: Pavement engineers, contractors

Asphalt Use in Water Environments

Product: Factsheet

Date produced: 1991

Source: Asphalt Institute

Contact: Ross Bentsen, Director of Education, Asphalt Institute, Research Park Drive, P.O. Box 14052, Lexington, KY 40512-4052

Telephone/Fax: Tel: (606) 288-4983

Cost/terms: \$2

Description: State of the art research results

continue to illustrate the inert properties of hot-mix asphalt in water environments (IS-186).

Target audience: Pavement engineers, designers, contractors

Basic Asphalt Emulsion Manual

Product: Manual

Date produced: 1987, second edition

Source: Asphalt Institute

Contact: Ross Bentsen, Director of Education, Asphalt Institute, Research Park Drive, P.O. Box 14052, Lexington, KY 40512-4052

Telephone/Fax: Tel: (606) 288-4983

Cost/terms: \$18

Description: The manual explains the general characteristics of asphalt emulsions and their uses. It helps readers evaluate pavement systems for construction and maintenance. Chapters include information on chemistry, manufacturing, storing, handling, sampling, testing and selecting the correct emulsion, and hot and cold mixes. It also contains information on recycling (MS-19).

Target audience: Personnel involved in pavement construction

Chip Seals and Surface Treatments

Product: Manual

Date produced: 1991

Source: Cornell Local Roads Program (CLRP)

Contact: Amy Dreher, Resource and Information Specialist, CLRP, 416 Riley-Robb Hall, Ithaca, NY 14853-5701

Telephone/Fax: Tel: (607) 255-8033, Fax: (607) 255-4080

E-mail/Other: E-mail: clrp@cornell.edu

Cost/terms: Free to New York State highway and public works officials; \$5 to others

Description: This manual is intended for highway officials and public works personnel who are responsible for surface treatment operations. Topics include chip seal materials and construction techniques, multiple chip seals, slurry seal treatments, choosing surface treatments for pavements, and training crews for chip sealing.

Target audience: Highway officials, public works personnel

Cold Mix Recycling

Product: Videocassette (17 min.)

Date produced: 1987

Source: Pennsylvania Department of Transportation

Contact: Pennsylvania Department of Transportation Employees Library, Forum Place, 555 Walnut St., 8th Floor, Harrisburg, PA 17101-1900

Telephone/Fax: Tel: (717) 787-6527, Fax: (717) 772-8282

Cost/terms: \$35

Description: This videocassette on recycling low volume roads with cement fly ash shows research projects conducted in Susquehanna and Bradford counties to develop the use of cement and fly ash to stabilize existing roadways. Research project 84-14 shows a low cost, structurally sound pavement using existing roadway materials with the addition of fly ash and Portland cement (AV#00644).

Target audience: Engineers, superintendents

Concrete Testing

Product: Videocassette (39 min)

Date produced: 1993

Source: Michigan Department of Transportation

Contact: Michigan LTAP, Michigan Technological University, 1400 Townsend Dr., Houghton, MI 49931-1295

Telephone/Fax: Tel: (906) 487-2102, Fax: (906) 487-3409

E-mail/Other: E-mail: tlmcninc@mtu.edu

Cost/terms: Free loan or 4 for \$75

Description: Training in the methods of performing tests to check the quality of Portland Cement Concrete from field samples. Divided into three parts: 1) sampling, temperature, slump; 2) acme air meters; 3) molding cylinders, molding test beams, testing beams.

Target audience: Public agency supervisors and technicians

Construction Specifications for Asphalt Curbs and Gutters

Product: Factsheet

Date produced: 1978 (fourth edition)

Source: Asphalt Institute

Contact: Ross Bentsen, Director of Education, Asphalt Institute, Research Park Drive, P.O. Box 14052, Lexington, KY 40512-4052

Telephone/Fax: Tel: (606) 288-4983

Cost/terms: \$5

Description: Covers materials, curb and gutter foundation, new housing areas, specifications for machine-laid hot lant-mix curbs (SS-3).

Target audience: Pavement engineers, designers, contractors

Contaminated Soil Remediation

Product: Videocassette (59 min.)

Date produced: 1994

Source: Video University Productions, Inc.

Contact: Video University Productions, Inc., 3501 N. Happy Hollow Rd., Independence, MO 64058

Telephone/Fax: Tel: (800) 927-8444

Cost/terms: \$49

Description: This video covers thermal treatment of hydrocarbon contaminated soil at an asphalt plant, use of remediated soil in hot mix asphalt, types of contaminated soil that can be used and tracing contaminated soil from site to plant.

Target audience: Operations personnel, supervisors

Cool Concrete: The Earth-Friendly Pavement Material

Product: Manual

Date produced: 1996

Source: American Concrete Pavement Association (ACPA)

Contact: Lon D. Hawbaker, Director-Local Roads and Parking Areas, ACPA, 5420 Old Orchard Rd., Suite A100, Skokie, IL 60077-1059

Telephone/Fax: Tel: (847) 966-2272, Fax: (847) 966-9970, Orders: (800) 868-6733

E-mail/Other: E-mail:

lhawbaker@pavement.com, Web Site: <http://www.pavement.com>

Cost/terms: \$1.20, discounts available

Description: A short guide to concrete pavement's earth-friendly aspects. Explains the "green" qualities associated with concrete. Simply written, this four-color bro-

chure outlines the three basic points that are becoming more important every day: concrete is recyclable, reflective and cool (Code No. PL986P).

Target audience: Public officials, engineers, architects

Fast Track Concrete Pavements: More than Just High-Early Strength

Product: Reprint

Date produced: 1995

Source: American Concrete Pavement Association

Contact: Lon D. Hawbaker, Director-Local Roads and Parking Areas, ACPA, 5420 Old Orchard Rd., Suite A100 Skokie, IL 60077-1059

Telephone/Fax: Tel: (847) 966-2272, Fax: (847) 966-9970, Orders: (800) 868-6733

E-mail/Other: E-mail:

lhawbaker@pavement.com, Web Site: <http://www.pavement.com>

Cost/terms: \$1.50, discounts available

Description: Provides a non-detailed discussion of what is now known about fast-track concrete pavements. Describes key factors in planning, concrete materials, jointing, concrete curing, strength testing and traffic opening. Reprinted from Concrete International (Code No. RP338P).

Target audience: Engineers, designers

Geosynthetics Workshop for Municipal and State Engineers

Product: Course Materials

Date produced: 1991

Source: North Carolina T² Program

Contact: James B. Martin, Associate Director for Programs, Institute for Transportation Research and Education, North Carolina State University, Campus Box 8601, Raleigh, NC 27695-8601

Telephone/Fax: Tel: (919) 515-8033, Fax: (919) 515-8898

Cost/terms: Free loan; may duplicate

Description: This course presents the very basic information concerning geosynthetic materials and general information on the various applications of these materials. Participants will leave with sufficient training

to allow them to make knowledgeable decisions concerning the use of geosynthetic materials.

Target audience: Municipal and state engineers

Introduction to Asphalt (Eighth Edition)

Product: Manual

Source: Asphalt Institute

Contact: Ross Bentsen, Director of Education, Asphalt Institute, Research Park Drive, P.O. Box 14052, Lexington, KY 40512-4052 Telephone/Fax: Tel: (606) 288-4983

Cost/terms: \$10

Description: Summary information relating to asphalts, uses, brief history, definitions, tests and specifications (MS-5)

Target audience: General

Mix Design Methods for Asphalt Concrete and Other Hot-Mix Types

Product: Manual

Date produced: 1994

Source: Asphalt Institute

Contact: Ross Bentsen, Director of Education, Asphalt Institute, Research Park Drive, P.O. Box 14052, Lexington, KY 40512-4052 Telephone/Fax: Tel: (606) 288-4983

Cost/terms: \$15

Description: This manual is a practical guide to asphalt mix design (Marshall or Hveem) (MS-2).

Target audience: Engineers, technicians

Model Construction Specifications for Asphalt Concrete and Other Plant-Mix Types

Product: Factsheet

Date produced: 1984

Source: Asphalt Institute

Contact: Ross Bentsen, Director of Education, Asphalt Institute, Research Park Drive, P.O. Box 14052, Lexington, KY 40512-4052 Telephone/Fax: Tel: (606) 288-4983

Cost/terms: \$8

Description: The seventh edition of this valuable reference provides model construction specifications for hot-mix asphalt

mixtures. Also included are advice on procedures for developing specifications, tips on construction methods, model construction specifications hot-mixed sand asphalt (SS-1). **Target audience:** Pavement engineers, designers, contractors

Pavement Marking Inspection: Thermoplastic

Product: Videocassette (20 min.)

Date produced: 1990

Source: American Traffic Safety Services Association (ATSSA)

Contact: ATSSA, 5440 Jefferson Davis Highway, Fredericksburg, VA 22407-2673

Telephone/Fax: Tel: (800) 898-5400, (540) 898-5400, Fax: (540) 898-5510

E-mail/Other: E-mail: general@atssa.com, Web Site: <http://www.atssa.com>

Cost/terms: ATSSA members and public agencies \$25, non-members \$50

Description: This video covers the basics of thermoplastic application, including material preparation; weather and temperature restrictions; pavement preparation; testing for adequate bond, thickness and reflectivity; and complete and accurate documentation of the work performed. It also includes 25 copies of the Inspector's Guide and a Daily Inspection Record.

Target audience: Public agency highway inspectors

Pavement Marking Inspection: Traffic Paint

Product: Videocassette (15 min.)

Date produced: 1992

Source: American Traffic Safety Services Association (ATSSA)

Contact: ATSSA, 5440 Jefferson Davis Highway, Fredericksburg, VA 22407-2673

Telephone/Fax: Tel: (800) 898-5400, (540) 898-5400, Fax: (540) 898-5510

E-mail/Other: E-mail: general@atssa.com, Web Site: <http://www.atssa.com>

Cost/terms: ATSSA members and public agencies \$25, non-members \$50

Description: This video covers the basics of traffic paint application, including materials preparation, weather and temperature

restrictions, pavement preparation, workmanship, reflectivity and documentation. Includes 25 copies of an Inspector's Guide that reinforces points made in the video. **Target audience:** Public agency highway inspectors

Pavement Marking Inspection: Two-Part Epoxy

Product: Videocassette (20 min.)

Date produced: 1991

Source: American Traffic Safety Services Association (ATSSA)

Contact: ATSSA, 5440 Jefferson Davis Highway, Fredericksburg, VA 22407-2673

Telephone/Fax: Tel: (800) 898-5400, (540) 898-5400, Fax: (540) 898-5510

E-mail/Other: E-mail: general@atssa.com, Web Site: <http://www.atssa.com>

Cost/terms: ATSSA members and public agencies \$25, non-members \$50

Description: This video covers the basics of two-part epoxy pavement marking materials, including material preparation, weather and temperature restrictions, pavement preparation, workmanship, reflectivity and documentation. Includes 25 copies of an Inspector's Guide that reinforces points made in the video.

Target audience: Public agency highway inspectors

Performance Graded Asphalt Binder Specification and Testing

Product: Manual

Date produced: 1995

Source: Asphalt Institute

Contact: Ross Bentsen, Director of Education, Asphalt Institute, Research Park Drive, P.O. Box 14052, Lexington, KY 40512-4052

Telephone/Fax: Tel: (606) 288-4983

Cost/terms: \$12

Description: The Superpave Binder manual describes the new Superpave asphalt binder specification and the tests that it uses to classify asphalt binders (pressure aging, bendin bean rheometer, dynamic shear rheometer, direct tension test, rolling thin film oven, and rotational viscometer). Superpave is a product of the Strategic

Highway Research Program (SHRP) asphalt research. The relationships between the binder tests and pavement performance are described, and instruction is provided for asphalt binder selection in a pavement's given environmental conditions (SP-1).
Target audience: Pavement engineers, designers, contractors

Performance Graded Asphalt Specification and Testing

Product: Manual

Date produced: 1994

Source: Asphalt Institute

Contact: Ross Bentsen, Director of Education, Asphalt Institute, Research Park Drive, P.O. Box 14052, Lexington, KY 40512-4052
Telephone/Fax: Tel: (606) 288-4983

Cost/terms: \$12

Description: This manual describes the new Superpave binder specifications and tests used to classify asphalt binders. The relationship between the binder tests and pavement performance are described and instruction is provided for asphalt binder selection in a pavement project's given environmental conditions (SP-1).

Target audience: Engineers, designers, testing laboratories

Sampling Aggregate and Aggregate Mixtures

Product: Manual

Date produced: 1994

Source: Louisiana T² Program

Contact: Louisiana Transportation Research Center, 4101 Gourrier Ave., Baton Rouge, LA 70808

Telephone/Fax: Tel: (504) 767-9117, Fax: (504) 767-9156

E-mail/Other: E-mail: laltap@ltrc.lsu.edu

Cost/terms: One free copy for public agencies/may duplicate; \$5 for private/may not duplicate

Description: This manual covers sampling from stockpiles, barges, windrows, railroad cars, trucks, roadways, conveyor belts, bins and truck-dumped materials before spreading. It includes chapters on estimating volume

and filling out the Aggregate Test Report.

Target audience: Inspectors and technicians

Sampling Aggregates

Product: Videocassette (26 min.)

Date produced: 1995

Source: Michigan Department of Transportation

Contact: Michigan LTAP, Michigan Technological University, 1400 Townsend Dr., Houghton, MI 49931-1295

Telephone/Fax: Tel: (906) 487-2102, Fax: (906) 487-3409

E-mail/Other: E-mail: tlmcninc@mtu.edu

Cost/terms: Free loan or 4 for \$75

Description: Demonstrates the correct procedures for collecting representative aggregate samples using standards developed by the Michigan Department of Transportation.

Target audience: Public agency supervisors and technicians

Sampling and Testing of Plastic Concrete

Product: Self-study text

Date produced: 1993

Source: Louisiana Department of Transportation and Development (DOTD)

Contact: Louisiana Transportation Research Center, 4101 Gourrier Ave., Baton Rouge, LA 70808

Telephone/Fax: Tel: (504) 767-9117, Fax: (504) 767-9156

E-mail/Other: E-mail: laltap@ltrc.lsu.edu

Cost/terms: One free copy for public agencies/may duplicate; \$10 for private/may not duplicate

Description: This manual covers sampling plastic concrete; inspecting testing equipment; testing for slump air molding cylinders; checking internal temperature on concrete; determining yield; and performing calculations.

Target audience: Inspectors and technicians

Sampling Asphalt Products for Specification Compliance (Second Edition)

Product: Manual

Source: Asphalt Institute

Contact: Ross Bentsen, Director of Education, Asphalt Institute, Research Park Drive, P.O. Box 14052, Lexington, KY 40512-4052
Telephone/Fax: Tel: (606) 288-4983

Cost/terms: \$6

Description: Guide to obtaining asphalt samples that show true nature and condition of asphalt. Methods for sampling asphalt from vehicle tanks, above-ground stationary tanks, railroad tanks at origin and destination. Contains guide for putting vehicle tanks in proper condition for loading asphalt products. Stresses necessity for strict control procedures (MS-18).

Target audience: Technicians, inspectors

Sand Equivalent Test

Product: Videocassette

Date produced: 1993

Source: Louisiana Department of Transportation and Development (DOTD)

Contact: Louisiana Transportation Research Center, 4101 Gourrier Ave., Baton Rouge, LA 70808

Telephone/Fax: Tel: (504) 767-9117, Fax: (504) 767-9156

E-mail/Other: E-mail: laltap@ltrc.lsu.edu

Cost/terms: Free six week loan for public agencies/may duplicate; \$20 for private to loan, \$85 to buy/may not duplicate

Description: This video demonstrates the proper technique for preparing samples, performing the test procedure and obtaining results for clay content in soils and fine aggregates used in asphaltic concrete.

Target audience: Inspectors and technicians

Slurry Seal

Product: Videocassette (30 min.)

Date produced: 1994

Source: Video University Productions, Inc.

Contact: Video University Productions, Inc., 3501 N. Happy Hollow Rd., Independence, MO 64058

Telephone/Fax: Tel: (800) 927-8444

Cost/terms: \$69

Description: This video explores the advantages and limitations of slurry seal, demonstrating both good and bad applications practices.

Target audience: Operations personnel, supervisors

Subgrades

Product: Slides with script

Date produced: 1991

Source: American Concrete Pavement Association

Contact: Lon D. Hawbaker, Director-Local Roads and Parking Areas, ACPA, 5420 Old Orchard Rd., Suite A100, Skokie, IL 60077-1059

Telephone/Fax: Tel: (847) 966-2272, Fax: (847) 966-9970, Orders: (800) 868-6733

E-mail/Other: E-mail:

lhawbaker@pavement.com, Web Site: <http://www.pavement.com>

Cost/terms: \$45

Description: This slide set gives basic data on placing, grading and compacting subgrade soils. It describes construction controls and testing required to produce a uniform, well-compacted subgrade. It includes and outline and a 12-page script (Code No. SS511P). A companion publication, "Subgrades and Subbases for Concrete Pavement," is available as a study reference (Code No. TB011P).

Target audience: Engineers

Superpave Mix Design

Product: Manual

Date produced: 1995

Source: Asphalt Institute

Contact: Ross Bentsen, Director of Education, Asphalt Institute, Research Park Drive, P.O. Box 14052, Lexington, KY 40512-4052
Telephone/Fax: Tel: (606) 288-4983

Cost/terms: \$16

Description: The Superpave Mix Design manual presents the concepts and criteria involved with the Superpave asphalt mix design system. The Superpave aggregate tests and criteria are described, including aggregate consensus and source properties,

the aggregate gradation control points and the restricted zone. A full Superpave mix design example is presented, including discussions of the design aggregate structure, mixture volumetrics, the Superpave gyratory compactor, and the selection of the design compaction level (SP-2).

Target audience: Pavement engineers, designers, contractors

Aggregate consensus standards, the performance-graded asphalt binder specification and mix volumetric requirements are presented in an easy to understand format (PV-004).

Target audience: Supervisors, lab personnel

Unbonded Concrete Overlays

Product: Slides with script

Date produced: 1991

Source: American Concrete Pavement Association

Contact: Lon D. Hawbaker, Director-Local Roads and Parking Areas, ACPA, 5420 Old Orchard Rd., Suite A100, Skokie, IL 60077-1059

Telephone/Fax: Tel: (847) 966-2272, Fax: (847) 966-9970, Orders: (800) 868-6733

E-mail/Other: E-mail:

lhawbaker@pavement.com, Web Site: <http://www.pavement.com>

Cost/terms: \$110

Description: These slides provide guidance for design and construction decision-making. All aspects of the technique are covered from pre-overlay repair, to interlayer selection to jointing (Code No. SS505P). A companion publication, "Guidelines for Unbonded Concrete Overlays," is available as a study guide (Code No. TB005P).

Target audience: Engineers

Understanding Superpave Mix Design

Product: Videocassette (13 min.)

Date produced: 1996

Source: National Asphalt Pavement Association (NAPA)

Contact: NAPA, 5100 Forbes Blvd., Lanham, MD 20706

Telephone/Fax: Tel: (301) 731-4748, Fax: (301) 731-4621

E-mail/Other: E-mail: napa@hotmix.org, Web Site: <http://www.hotmix.org>

Cost/terms: NAPA members \$15, nonmembers \$30

Description: This short video presents the Superpave volumetric mix design system.

Organizations



AIMS Multimedia

Contact: AIMS Multimedia, 9710 DeSoto Ave., Chatsworth, CA 91311-4409

Telephone/Fax: Tel: (800) FOR-AIMS

Description: AIMS Multimedia produces training videos covering the following topics: workplace safety, safety gear, basic safety training, injury prevention, OSHA and DOT regulations, driving and passenger safety, driving tactics, and alcohol and substance abuse.

American Association of State Highway and Transportation Officials (AASHTO)

Contact: AASHTO, 444 North Capitol St., NW, Suite 249, Washington, DC 20001

Telephone/Fax: Tel: (202) 624-5800, Fax: (202) 624-5806

E-mail/Other: E-mail: aashto@aashto.org,

Web Site: <http://www.aashto.org>

Description: AASHTO is a nonprofit, nonpartisan association that represents the member highway and transportation departments in the 50 states, the District of Columbia and Puerto Rico. Its primary goal is to foster the development, operation and maintenance of an integrated national transportation system, and its interests cover the five principal transportation modes.

Through its technical activities, AASHTO develops voluntary standards and guidelines which are widely used in the design, construction, maintenance and operation of national highway and transportation facilities. AASHTO provides information on transportation topics, including periodicals, reference books and proceedings on materials, bridges and structures, construction and right-of-way, design and traffic, maintenance,

highway transport, planning and environment, and administration and economics.

Title: American Concrete Pavement Association (ACPA)

Contact: Lon D. Hawbaker, Director-Local Roads and Parking Areas, ACPA, 5420 Old Orchard Rd., Suite A100

Skokie, IL 60077-1059

Telephone/Fax: Tel: (847) 966-2272, Fax: (847) 966-9970, Orders: (800) 868-6733

E-mail/Other: E-mail:

lhawbaker@pavement.com, **Web Site:** <http://www.pavement.com>

Description: ACPA offers information on concrete pavements through more than 100 publications, audiovisual materials and computer programs. ACPA also offers technical bulletins covering design, construction and maintenance. In 1993, the Portland Cement Association's pavement operations merged with the American Concrete Pavement Association.

American Public Works Association (APWA)

Contact: APWA, 2345 Grand Blvd., Suite 500, Kansas City, MO 64108-2625

Telephone/Fax: Tel: (816) 472-6100, Fax: (816) 472-1610

E-mail/Other: E-mail:

apwa@mail.pubworks.org, **Web Site:** <http://www.pubworks.org/apwa>

Description: The mission of APWA is to improve the quality of life by providing a forum for the development and exchange of ideas, information and technology, which enhances the delivery of public services by promoting the personal and professional growth of its members and by advancing public works issues on the public agenda.

APWA offers workshops and teleconferences on a variety of topics related to public works operations. APWA also offers a variety of manuals to help public works professionals manage a range of problems and issues more effectively. Transportation- and management-related publications from APWA include:

- Alternative Fuels;
- The Hole Story;
- Publics Works Management Practices;
- Managing Public Equipment;
- Contracting Maintenance Services;
- Water Quality: Urban Runoff Solutions;
- Tackling Gridlock; and
- Plan. Predict. Prevent. How to Reinvest in Public Buildings.

American Road and Transportation Builders Association (ARTBA)

Contact: ARTBA, The ARTBA Building, 1010 Massachusetts Ave., NW, Washington, DC 20001

Telephone/Fax: Tel: (202) 289-4434, Fax: (202) 239-4435

E-mail/Other: E-mail: artba@artba.com, Web Site: <http://www.artba.org>

Description: ARTBA is a national federation representing the transportation construction industry. ARTBA represents the industry's viewpoint and works with Congress and government agencies to advance our nation's transportation systems. In addition, ARTBA assists in the preparation of documents and position papers for the planning, design, development, operation and maintenance of all modes of transportation. Publications available from ARTBA include directories, professional guides and manuals, legislative reports, ARTBA Newsletter and the monthly Transportation Builder magazine. The association also has an online news service.

American Society of Civil Engineers (ASCE)

Contact: ASCE, Continuing Education, 1801 Alexander Bell Drive, Reston, VA 20191-6000
Telephone/Fax: Tel: (703) 295-6000, Fax: (703) 295-6222

E-mail/Other: Web Site: <http://www.asce.org>

Description: ASCE works to advance the science and profession of civil engineering through education and publications. ASCE offers videos and professional development courses in the areas of risk management, the environment, design and management skills.

American Traffic Safety Services Association (ATSSA)

Contact: ATSSA, 5440 Jefferson Davis Highway, Fredericksburg, VA 22407-2673

Telephone/Fax: Tel: (800) 898-5400, (540) 898-5400, Fax: (540) 898-5510

E-mail/Other: E-mail: general@atssa.com, Web Site: <http://www.atssa.com>

Description: ATSSA is a not-for-profit trade association representing the traffic safety industry, including companies that supply traffic control and safety devices, materials and services to governmental agencies and private industry. ATSSA offers publications, videos, training courses and certification programs. The ATSSA Certification Program for Worksite Traffic Supervisors/Technicians and Pavement Marking Technicians/Specialists recognizes people who have achieved advanced levels of training and expertise in performing traffic control services. It is a joint effort of ATSSA, the Institute of Transportation Engineers and the Federal Highway Administration. ATSSA certification requires completion of the ATSSA WTS/PMT training course or its equivalent, a passing grade on the certification exam administered by ATSSA, at least one year of satisfactory experience and two professional references. For more information, contact the ATSSA Education Department at (540) 898-5449.

Asphalt Emulsion Manufacturers Association (AEMA)

Contact: AEMA, 3 Church Circle, Suite 250, Annapolis, MD 21401

Telephone/Fax: Tel: (410) 267-0023, Fax: (410) 267-7546

E-mail/Other: Web Site: <http://rampages.onramp.net/~prime/AEMApge.htm>

Description: AEMA offers publications, including: AEMA Recommended Performance Guidelines, mix descriptions brochure, pavement recycling brochure, surface treatments brochure, and proceedings.

Asphalt Institute

Contact: Asphalt Institute, Research Park Drive, P.O. Box 14052, Lexington, KY 40512-4052

Telephone/Fax: Tel: (606) 288-4960, Fax: (606) 288-4999

E-mail/Other: Web Site: <http://www.asphaltinstitute.org>

Description: The Asphalt Institute is an international nonprofit organization sponsored by members of the petroleum industry to serve both users and producers of asphalt materials through programs of engineering service, research and education. The Asphalt Institute offers manuals, specifications, research reports, educational materials, construction leaflets, computer programs, videos and slide-tape presentations.

Asphalt Recycling and Reclaiming Association (ARRA)

Contact: ARRA, 3 Church Circle, Suite 250, Annapolis, MD 21401

Telephone/Fax: Tel: (410) 267-0023, Fax: (410) 267-7546

E-mail/Other: E-mail: 74603.3345@compuserve.com, Web Site: <http://rampages.onramp.net/~prime/arrapage.htm>

Description: ARRA publications include materials and guideline specifications for cold planing, cold in-place recycling, hot-mix recycling, hot in-place recycling, full depth reclamation, and reclamation methods for asphalt pavement rehabilitation.

Bureau of Transportation Statistics (BTS)

Contact: BTS, 400 7th St., SW, Room 3430 Washington, DC 20590

Telephone/Fax: Tel: (202) 366-DATA, Fax: (202) 366-3640, Fax-on-demand: (800) 671-8012

E-mail/Other: E-mail: info@bts.gov, Web Site: <http://www.bts.gov>

Description: The BTS offers statistical information and a number of electronic and printed products relating to transportation information, including the Directory of Transportation Data Sources, Commodity Flow Survey, Traffic Safety Data CD-ROM and the National Personal Transportation Survey.

Center for Microcomputers in Transportation (McTrans)

Contact: William M. Sampson, McTrans Manager, University of Florida, 512 Weil Hall, P.O. Box 116585, Gainesville, FL 32611-6585
Telephone/Fax: Tel: (352) 392-0378, Fax: (352) 392-3224

E-mail/Other: E-mail: mctrans@ce.ufl.edu, electronic bulletin board (352) 392-3225, messages (800) 226-1013

Description: McTrans is a major source of public domain shareware and privately developed software in the transportation field. McTrans offers software in highway engineering, construction management, transportation planning, traffic engineering, safety and accident records, and transit operations. McTrans also offers some general purpose utilities. Technical support is available for most of the software, as well as training on some packages. A 24-hour electronic bulletin board, McLink, is also available. Membership is free and includes a quarterly newsletter and annual catalog.

Construction Industry Manufacturers Association (CIMA)

Contact: Edward L. Roszkowski, Director of Technical Services, CIMA, 111 E. Wisconsin Ave., Milwaukee, WI 53202-4879

Telephone/Fax: Tel: (414) 272-0943, Fax: (414) 272-1170

E-mail/Other: E-mail: Technical@CIMANet.com

Description: CIMA is the U.S.-based international trade group representing the producers of construction machinery and construction-related services used worldwide in the general construction, housing, road building, mining, energy and forestry fields. CIMA makes available a wide variety of safety,

training, technical and informational materials on construction machines. These include operator safety manuals, slide programs, standards on crane and excavators, and informational publications.

Construction Metrication Council

Contact: Construction Metrication Council, National Institute of Building Sciences, 1201 L St., NW, Suite 400, Washington, DC 20005
Telephone/Fax: Tel: (202) 289-7800, Fax: (202) 289-1092

Description: The Construction Metrication Council of the National Institute of Building Sciences provides industry-wide, public and private sector support for the metrication of federal construction and promotes the adoption and use of the metric system as a means of increasing the international competitiveness, productivity, and quality of the U.S. construction industry. Its newsletter, *Metric in Construction*, is available at no charge (requests by fax only). Other publications include *Metric Guide for Federal Construction*, *M2: Metric Design Guide*, *Nine Metric Construction Case Studies*, and *Preferred Metric Numbers for Building Construction*.

Institute of Transportation Engineers (ITE)

Contact: ITE, 525 School St., SW, Suite 410, Washington, DC 20024-2797
Telephone/Fax: Tel: (202) 554-8050, Fax: (202) 863-5486

E-mail/Other: Web Site: <http://www.ite.org>

Description: ITE is a professional society of more than 12,500 transportation engineers and planners responsible for the safe and efficient movement of people and goods on streets, highways and transit systems in 70 countries. Institute programs and resources include professional development seminars, technical reports, a monthly journal, local, regional and international meetings, and other forums for the exchange of ideas.

Intelligent Transportation Society (ITS) America

Contact: ITS America, 400 Virginia Ave., SW,

Suite 800, Washington, DC 20024-2730
Telephone/Fax: Tel: (800) 374-8472, Fax: (202) 484-3483

E-mail/Other: Web Site: <http://www.itsa.org>

Description: ITS America is a national public/private organization established to coordinate the development and deployment of Intelligent Transportation Systems in the United States. The ITS America Bookstore makes available a collection of books, serials, videos and slides on Intelligent Transportation Systems. The Bookstore sells not only those materials produced by ITS America, but also is the exclusive distributor of a collection of I-95 Corridor Coalition documents. In addition, all U.S. Department of Transportation ITS documents are available from the Bookstore.

Interlocking Concrete Pavement Institute (ICPI)

Contact: David R. Smith, Director, ICPI, 1323 Shepard Dr., Suite D, Sterling, VA 20164
Telephone/Fax: Tel: (703) 450-4998, Fax: (703) 450-0482

E-mail/Other: E-mail: ICPI@mail.wdn.com

Description: The ICPI provides technical support to users of concrete pavers in streets and represents this industry in North America. Resources available from ICPI include:

- PAVESPEC Software for the Structural Design of Interlocking Concrete Pavements;
- TECH Spec 1 - Glossary of Terms for Interlocking Concrete Pavements (brochure);
- TECH Spec 2 - Construction of Interlocking Concrete Pavements (brochure);
- TECH Spec 3 - Edge Restraints for Interlocking Concrete Pavements (brochure);
- TECH Spec 4 - Structure Design of Interlocking Concrete Pavements (brochure);
- TECH Spec 5 - Cleaning and Sealing Interlocking Concrete Pavements (brochure);

- TECH Spec 6 - Reinstatement of Interlocking Concrete Pavements (brochure);
- TECH Spec 7 - Repair of Utility Cuts with Interlocking Concrete Pavements (brochure);
- ZAPHERS Software of Construction Details and Guide Specifications for Interlocking Concrete Pavements; and
- ICPI Basic Level Interlocking Concrete Pavement Contractor Certification - Student Manual and Instructor's Guide.

International City/County Management Association (ICMA)

Contact: ICMA, 777 N. Capitol St., NE, Suite 500, Washington, DC 20002

Telephone/Fax: Tel: (202) 962-3658, Fax: (202) 962-3500

E-mail/Other: E-mail: MFrisky@icma.org

Description: ICMA is a professional and educational organization of more than 8,000 appointed administrators and serving cities, counties and other local governments and regional entities. The goals of ICMA are to enhance the quality of local government through professional management and to support and assist professional local government administrators internationally. The association provides technical assistance, training and publications for local government professionals. ICMA also serves as a clearinghouse for the collection, analysis and dissemination of information and data about local government.

International Road Federation (IRF)

Contact: IRF, 2600 Virginia Ave., NW, Suite 208, Washington, DC 20037

Telephone/Fax: Tel: (202) 338-4641, Fax: (202) 338-8104

Description: The IRF is an international nonprofit service organization that encourages better road and transportation systems worldwide. The IRF Videotape Training Library includes: Series 01 - Road Maintenance (18 titles); Series 02 - Equipment Maintenance and Operation (18 titles); Series 03 - Construction Inspection (9 titles);

Series 04 - Cement and Concrete Testing (7 titles); Series 05 - Traffic Control (7 titles); Series 06 - Jobsite Safety (3 titles); Series 07 - Highway Safety (3 titles); Series 08 - Contract Maintenance (3 titles); and Series 09 - Highway Management Systems (9 titles).

International Slurry Surfacing Association (ISSA)

Contact: John L. Fiegel, Executive Director, ISSA, 1200 19th St., NW, Suite 300, Washington, DC 20036

Telephone/Fax: Tel: (202) 857-1160, Fax: (202) 223-4579

E-mail/Other: E-mail: john_fiegel@sba.com

Description: Founded in 1963, ISSA is a nonprofit association dedicated to the interests, education and successes of slurry surfacing professionals and corporations around the world. ISSA offers a wide range of publications and audio-visual materials, including videocassettes, guidelines specifications, information on slurry and microsurfacing uses and applications, design technical bulletins, inspectors' manuals, quality control brochures and convention proceedings.

NACE International

Contact: Shelley Leavitt Nadel, Director, Membership and Public Affairs, NACE International, P.O. Box 218340, Houston, TX 77218-8340

Telephone/Fax: Tel: (713) 492-0535 ext. 245, Fax: (713) 492-8254

E-mail/Other: E-mail: shelley@mail.nace.org

Description: NACE International is a professional society dedicated to disseminating technology of corrosion control and prevention. NACE International offers education, training and certification programs, conferences, symposia and expositions, as well as books, magazines, journals, standards and software. They offer general education courses in basic corrosion, cathodic protection, protective coatings and linings, inspection and industry-specific short courses for the water and other industries. They also offer training videos on corrosion awareness and education.

National Asphalt Pavement Association (NAPA)

Contact: NAPA, 5100 Forbes Blvd., Lanham, MD 20706

Telephone/Fax: Tel: (301) 731-4748, Fax: (301) 731-4621

E-mail/Other: E-mail: napa@hotmix.org, Web Site: <http://www.hotmix.org>

Description: NAPA is a national trade association representing the interests of the U.S. Hot Mix Asphalt (HMA) producers and paving contractors. Governmental agencies and educational institutions receive discounts on publications.

National Association of County Engineers (NACE)

Contact: NACE, 440 First St., NW, Washington, DC 20001-2028

Telephone/Fax: Tel: (202) 393-5041, Fax: (202) 393-2630

E-mail/Other: E-mail: nace@naco.org, Web Site: <http://www.naco.org/affils/nace/index.htm>

Description: NACE works to advance county engineering and management by providing a forum for exchange of ideas and information aimed at improving the county engineering profession. NACE offers training guides, action guides and videocassettes. The NACE Training Guide Series includes:

- Handbook on Training for Road Departments
- Trainers Guide
- Blading Aggregate Surfaces
- How to Talk and Communicate at the Same Time
- Improving Traffic Maintenance
- Tips for Conserving the Environment and Energy
- Bridge Maintenance on Local Roads

The NACE Action Guides include:

- Organization
- Personnel
- Financial Management
- Maintenance Management
- Administration of Bridge Inspection

- Tort Liability
- Road Programming
- Road Surface Management
- Safety Improvements
- Drainage
- Subsurface Soils Exploration
- Soil Erosion and Water Pollution Prevention
- Bridge Rehabilitation on Local Roads
- Rural Transportation Planning
- Purchasing Authority
- Impact of Land Development on County & Local Transportation System Planning
- Solid Waste Management
- Public Awareness & Support Traffic Operations

Videocassettes available from NACE include:

- Effective Snow Fences
- Plows of the Future
- Deicing Chemicals
- Snow & Ice Control
- Concrete Bridge Protection
- New Work Zone Safety Devices
- Pavement Maintenance Evaluation
- Staying Ahead of the Storm
- Finding Better Ways
- Blading Unpaved Roads
- Work Zone Safety

National Highway Traffic Safety Administration (NHTSA) Office of Traffic Safety Programs

Contact: NHTSA, Department of Transportation, 400 7th St., SW, Room 5118, Washington, DC 20590

Telephone/Fax: Fax: (202) 493-2062

Description: NHTSA's Office of Traffic Safety Programs provides national leadership and technical assistance to states and local communities in developing, implementing, evaluating and disseminating information about highway safety programs. Audio-visual materials, reports, manuals and handouts are available covering such topics as bicycle and motorcycle safety; community traffic

safety; emergency medical services; occupant protection; police traffic safety enforcement; and school bus and pedestrian safety.

Northwestern University Traffic Institute

Contact: Northwestern University Traffic Institute, 405 Church St., P.O. Box 1409, Evanston, IL 60204
Telephone/Fax: Tel: (800) 323-4011, (847) 491-5040, Fax: (847) 491-5270
E-mail/Other: Web Site: <http://www.nwu.edu/traffic>

Description: The Traffic Engineering Division of the Institute offers continuing education courses including:

- Accident Reconstruction for Traffic Engineers;
- Bicycle Planning and Facilities Workshop;
- Fundamentals of Geometric Design;
- Geometric Design Workshop;
- Highway Capacity Workshop;
- Highway-Railroad Grade Crossing Workshop;
- Identification and Treatment of High Hazard Locations;
- Legal Liability Workshop;
- Low Cost Improvements for Two Lane Highways;
- Managerial Skills for Transportation Engineers;
- Microcomputer Applications in Signal Timing;
- Parking Facility Planning and Design Workshop
- Pedestrian Planning and Facilities Workshop;
- Roadside Design Workshop;
- Seminar for Traffic Engineering Technical Assistants;
- Strategies for Urban Traffic Congestion;
- Traffic and Transportation Engineering Seminar;
- Traffic Control Devices Workshop;
- Traffic Management of Land Development;

- Traffic Signal Workshop; and
- Work Zone Traffic Control Workshop.

Pan American Institute of Highways (PIH)

Contact: Gregory Speier, Pan American Institute of Highways, 901 S. Stuart St., Suite 300, Arlington, VA 22203
Telephone/Fax: Tel: (703) 235-0547, Fax: (703) 235-0593

E-mail/Other: E-mail: gspeier@intergate.dot.gov

Description: The PIH is a network of over 70 technology transfer centers from 20 countries of the Americas and Spain. The PIH has an international course catalog, video library catalog, and a mailing list of more than 2,000 professional catalogs available upon request.

PC-TRANS

Contact: PC-TRANS, Kansas University Transportation Center, 2011 Learned Hall, Lawrence, KS 66045

Telephone/Fax: Tel: (913) 864-5655, Fax: (913) 864-3199

E-mail/Other: E-mail: givechi@kuhub.cc.ukans.edu, PC-TRANS-PORT BBS: (913) 864-5058; Web Site: <http://kuhub.cc.ukans.edu/pctrans>

Description: PC-TRANS offers a variety of services and products for transportation professionals who use computer technology, including the following: PC-TRANS magazine which provides technical support and information for transportation professionals at all levels of microcomputing expertise; PC-TRANS Software Distribution Service Catalog which lists software from FHWA, other public agencies and private vendors; PCs in Transportation Software Directory which provides information on more than 650 transportation-related software programs; Hands-on workshops; and PC-TRANSPORT electronic bulletin board which offers public domain software available for downloading.

Portland Cement Association

Contact: Wayne S. Adaska, Director Public Works, Portland Cement Association, 5420 Old Orchard Rd., Skokie, IL 60077-1083

Telephone/Fax: Tel: (847) 966-6200, Fax: (847) 966-8389

E-mail/Other: E-mail:

wayne_adaska@portcement.org, Web Site: <http://www.portcement.org>

Description: The Portland Cement Association offers more than 500 publications, slide sets and computer programs covering all aspects of cement and concrete. Topics include architectural concrete, bridges, paving, residential buildings, commercial buildings, structural design, maintenance and repair, research, inspections, testing, masonry mortars, plasters and training materials.

Public Risk Management Association (PRIMA)

Contact: PRIMA, 1815 N. Fort Meyer Dr., Arlington, VA 22209

Telephone/Fax: Tel: (703) 528-7701, Fax: (703) 528-7966

E-mail/Other: Web Site: <http://www.financenet.gov/prima.htm>

Description: PRIMA promotes effective public risk management and increasing risk management professionalism in the public sector. PRIMA helps public agencies ensure a safe workplace and community for all. PRIMA sponsors a Government Risk Management Seminar annually, and offers other seminars and conferences throughout the year. In addition, PRIMA publishes a variety of books, manuals, guides, videos and handbooks on risk management topics.

Safety Shorts

Contact: Safety Shorts, 2960 N. 23rd St., La Porte, TX 77571-3182

Telephone/Fax: Tel: (800) 458-2236, Fax: (713) 470-8653

Description: Safety Shorts produces inexpensive safety training products designed to get your employees' attention and relay information in a way that will be remembered. Many of the videos are offered in a choice of six languages.

Salt Institute

Contact: Salt Institute, 700 N. Fairfax St., Suite 600, Alexandria, VA 22314-2040

Telephone/Fax: Tel: (703) 549-4648, Fax: (703) 548-2194

E-mail/Other: E-mail: info@saltinstitute.org, Web Site: <http://www.saltinstitute.org>

Description: The Salt Institute is an association whose members are salt producers. The Institute's activities include research, information services and government relations. The Salt Institute offers publications and audiovisual materials. Audiovisual materials include The Snowfighter, Risk Management/Good Highway Winter Maintenance, and Sensible Salting Program. Publications include Deicing Salt and Our Environment, Salt Storage Handbook, The Snowfighter's Handbook, and Snowball/Snowfighter.

Steel Structures Painting Council (SSPC)

Contact: SSPC, 40 24th St., 6th Floor, Pittsburgh, PA 15222-4643

Telephone/Fax: Tel: (412) 281-2331, Fax: (412) 281-9992

E-mail/Other: E-mail: bernie49@sgi.net

Description: SSPC is an association for professionals involved with protective coatings for industrial facilities and structures. Publications include manuals, visual standards, conference proceedings, reports on coating evaluations and accelerated testing methods, and resources on industrial lead paint removal. Training resources include: OSHA Lead in Construction Worker Training Program (instructor guidelines, worker handbook, slides); SSPC Videotape Training on Abrasives; SSPC Videotape Training Series on Protective Coatings (surface preparation, coatings technology, applications of coatings, quality control); and SSPC Videotape Training on Protective Coating Application and Inspection.

Strategic Highway Research Program (SHRP) Information Clearinghouse

Contact: Henderson Associates, Inc., 1000 Vermont Ave., NW, Suite 620, Washington, DC 20005

Telephone/Fax: Tel: (202) 682-3739, Fax:
(202) 682-2535
E-mail/Other: E-mail: henderson@radix.net,
Web Site: [http://www.hend.com/shrp/
shrp.htm](http://www.hend.com/shrp/shrp.htm)

Description: The SHRP web site provides access to four areas of information: 1) Product Information: Products can be searched by program area - Asphalt, Concrete and Structures, Snow and Ice Control, Pavement Maintenance, Work Zone Safety, and Long-Term Pavement Performance. Products can also be searched by their product numbers. Each listing includes an abstract of related SHRP reports, and a person to contact for more information. Each listing also has a link to the Transportation Research Board online bookstore, where copies of the SHRP research reports can be obtained. 2) Directory: This area includes an easy to search master directory of hundreds of state, federal and private-sector employees involved with SHRP implementation; a committee directory that lists the members of the technical working groups and other teams working on SHRP implementation; and a directory of state SHRP implementation coordinators. 3) Calendar: A comprehensive schedule of events related to SHRP implementation including upcoming conferences, showcases and workshops. Also provides links to the TRB, FHWA and OTA calendars. 4) Publications: The publications section provides links to the FOCUS monthly newsletter, quarterly SHRP Implementation Status Report, the TRB Bookstore and the Turner Fairbanks Highway Research Center publications list.

Topics covered include workplace safety, injury prevention, and OSHA/DOT compliance.

The Training Network

Contact: The Training Network, 1432
Kearney St., El Cerrito, CA 94530
Telephone/Fax: Tel: (800) 390-8283, (510)
232-8283, Fax: (510) 232-5235

Description: The Training Network publishes a catalog with more than 450 safety and training videos for \$99 each, 150 available in Spanish. The catalog also includes Safety Meeting Kits, employee booklets and posters, 5-7 minute Safety Bite videos, computer-based training and interactive CD-ROMs.

Planning and Design



Basic Urban Transportation Planning

Product: Course

Date produced: 1992 (updated 1994)

Source: Transportation Training Division, Texas Engineering Extension Service (TTD TEEX)

Contact: Nelson Evans, Head, TTD TEEX, The Texas A & M University System, College Station, TX 77843-8000
Telephone/Fax: Tel: (409) 845-4457, Fax: (409) 862-4768

E-mail/Other: E-mail: trevans@teexnet.tamu.edu

Cost/terms: Available on request

Description: This course assists state and local jurisdictions in dealing with the growth of congestion in urban and suburban areas. It provides participants with a broad understanding of the basic elements of urban transportation planning.

Target audience: Technical personnel in traffic operations

The Basics of a Good Road

Product: Videocassette

Date produced: 1995

Source: Wisconsin Transportation Information Center (TIC)

Contact: Mercy Ranum, Program Assistant, Wisconsin TIC, University of Wisconsin-Madison, 432 N. Lake St., Room 725A, Madison, WI 53706

Telephone/Fax: Tel: (608) 262-0422, Fax: (608) 263-3160

Cost/terms: Free loan of video and no charge for single copy of fact sheet

Description: An excellent presentation of the Ten Commandments of good road construc-

tion in simple, easy-to-understand language.

Target audience: Local road personnel, local elected and appointed officials

Benefits of Correct Commercial Driveway Construction

Product: Videocassette

Date produced: 1994

Source: Oregon Department of Transportation

Contact: Wes Heidenreich, Technology Transfer Coordinator, Oregon Technology Transfer Center, Oregon Department of Transportation, 2950 State St., Salem, OR 97310

Telephone/Fax: Tel: (503) 986-2854, Fax: (503) 986-2844

E-mail/Other: E-mail: wesley.HEIDENREICH@state.or.us

Cost/terms: Free loan; may duplicate. Send blank tape for duplication

Description: This videocassette demonstrates the importance of following recommendations of Oregon Department of Transportation Standard Drawing 2077Bon driveway dimensioning.

Target audience: Anyone with responsibilities for designing or installing driveways

Bicycle Planning and Facilities Workshop

Product: Course

Date produced: 1993

Source: Northwestern University Traffic Institute

Contact: Robert K. Seyfried, Director, Transportation Engineering, Northwestern University Traffic Institute, 405 Church St.,

Evanston, IL 60204
Telephone/Fax: Tel: (800) 323-4011, (847) 491-5040, Fax: (847) 491-5270
E-mail/Other: Web Site: <http://www.nwu.edu/traffic>

Cost/terms: Cost available on request

Description: This course will help transportation professionals discover that bicycle facility planning and design is an extensive process involving several segments of the community, and that there are many types of bicyclists, making many different types of trips, with differing needs.

Target audience: Local, state and federal transportation planners

Design Concepts from AASHTO

Product: Course

Date produced: 1991 (updated 1995)

Source: Transportation Training Division, Texas Engineering Extension Service (TTD TEEX)

Contact: Nelson Evans, Head, TTD TEEX, The Texas A & M University System, College Station, TX 77843-8000

Telephone/Fax: Tel: (409) 845-4457, Fax: (409) 862-4768

E-mail/Other: E-mail:

trevans@teexnet.tamu.edu

Cost/terms: Available on request

Description: This course is designed to introduce the AASHTO guide on geometric design, the "Green Book." The course covers new concepts as well as significant design policies and guidelines contained in the Green Book.

Target audience: Highway engineers, design personnel

Design of HMA Pavements for Commercial, Industrial and Residential Applications

Product: Manual

Date produced: 1991

Source: National Asphalt Pavement Association (NAPA)

Contact: NAPA, 5100 Forbes Blvd., Lanham, MD 20706

Telephone/Fax: Tel: (301) 731-4748, Fax: (301) 731-4621

E-mail/Other: E-mail: napa@hotmail.org, Web Site: <http://www.hotmix.org>

Cost/terms: NAPA members \$6, nonmembers \$24; discounts for government agencies and educational institutions, and for quantity

Description: This manual is a construction design guide for parking lots and other off-road pavements (IS-109).

Target audience: Architects, paving contractors

The Effect of Land Development on Transportation

Product: Course

Date produced: 1987 (updated 1995)

Source: Transportation Training Division, Texas Engineering Extension Service (TTD TEEX)

Contact: Nelson Evans, Head, TTD TEEX, The Texas A & M University System, College Station, TX 77843-8000

Telephone/Fax: Tel: (409) 845-4457, Fax: (409) 862-4768

E-mail/Other: E-mail:

trevans@teexnet.tamu.edu

Cost/terms: Available on request

Description: This course explores the relationship between increased land development and the movement of goods and people over the transportation system. The need to understand patterns and trends of growth before upgrading and expanding a roadway system is evaluated.

Target audience: Technical personnel in traffic operations

Fundamentals of Geometric Design

Product: Course

Date produced: 1995

Source: Northwestern University Traffic Institute

Contact: Robert K. Seyfried, Director, Transportation Engineering, Northwestern University Traffic Institute, 405 Church St., Evanston, IL 60204

Telephone/Fax: Tel: (800) 323-4011, (847) 491-5040, Fax: (847) 491-5270

E-mail/Other: Web site: <http://www.nwu.edu/traffic>

Cost/terms: Cost available on request

Description: This workshop covers the basic principles and concepts of geometric design of highways, intersections and interchanges. Practical solutions and design techniques are emphasized. The workshop includes extensive hands-on project sessions dealing with alignment and cross-sectional design and intersection layout and channelization. Workshop materials reflect the most recent AASHTO design criteria. All lecture and notebook materials and class design projects are presented in metric units.

Target audience: Design engineers and technicians

Geometric Design Workshop

Product: Course

Date produced: 1995

Source: Northwestern University Traffic Institute

Contact: Robert K. Seyfried, Director, Transportation Engineering, Northwestern University Traffic Institute, 405 Church St., Evanston, IL 60204

Telephone/Fax: Tel: (800) 323-4011, (847)

491-5040, Fax: (847) 491-5270

E-mail/Other: Web site: <http://www.nwu.edu/traffic>

Cost/terms: Cost available on request

Description: The objective of this course is to strengthen the expertise of highway engineers in current design concepts, criteria and techniques of this continually changing field. Includes geometric, functional and aesthetic aspects of street and highway design, with emphasis placed on application and design techniques.

Target audience: Design engineers and technicians

A Guide to Federal-Aid Programs, Projects, and Other Uses of Highway Funds

Product: Manual

Date produced: 1992

Source: Federal Highway Administration (FHWA)

Contact: Jack Wasley, HNG-10, FHWA Office of Engineering, 400 7th St., SW, Room 3134, Washington, DC 20590

Telephone/Fax: Tel: (202) 366-4658, Fax: (202) 366-3988

Cost/terms: Free

Description: This guide provides basic information about new programs, projects, and uses of highway funds authorized by the Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991; continuing programs, projects and uses of highway funds authorized by previous legislation and continued by the 1991 ISTEA; and inactive programs, projects and uses of highway funds that have existed in recent time.

Target audience: FHWA, state highway agencies, local governments and private sector personnel interested in a basic understanding of federal-aid programs, projects or uses of highway funds

Highway Design

Product: Course

Date produced: 1988 (updated 1995)

Source: Transportation Training Division, Texas Engineering Extension Service (TTD TEEX)

Contact: Nelson Evans, Head, TTD TEEX, The Texas A & M University System, College Station, TX 77843-8000

Telephone/Fax: Tel: (409) 845-4457, Fax: (409) 862-4768

E-mail/Other: E-mail:

trevans@teexnet.tamu.edu

Cost/terms: Available on request

Description: This course presents information on the various elements that impact highway design and utilizes that information in the example design of a highway facility.

Target audience: Technical personnel in traffic operations

Highway/Utility Coordination Issues

Product: Course

Date produced: 1994

Source: Federal Highway Administration (FHWA)

Contact: Paul Scott, HNG-10, FHWA Office of Engineering, 400 7th St., SW, Room 3134, Washington, DC 20590

Telephone/Fax: Tel: (202) 366-4104, Fax: (202) 366-3988

Cost/terms: \$4,500

Description: This three-day course provides training on the practical application in efficiently utilizing crowded highway right-of-way. It provides examples of good practices, especially of cooperative efforts between highway and utility organizations, and the utilization of the most advanced practices to accommodate and/or relocate utility facilities with reduced costs to users of highway and utility facilities (taxpayers/rate payers). The course is based on the Highway/Utility Guide.

Target audience: Federal, state and local engineers and public/private utility managers responsible for highway/utility activities

Highway/Utility Guide

Product: Manual

Date produced: 1993

Source: Federal Highway Administration (FHWA)

Contact: Paul Scott, HNG-10, FHWA Office of Engineering, 400 7th St., SW, Room 3134, Washington, DC 20590

Telephone/Fax: Tel: (202) 366-4104, Fax: (202) 366-3988

Cost/terms: Free copies upon request

Description: For many years there has been a need to assemble under one cover state-of-the-knowledge guidance on the better practices being employed to address the full array of issues that can arise from highway and utility facilities sharing common right-of-way. This Highway/Utility Guide provides useful information relevant to joint use issues, a historical perspective, and good current practices. Issues addressed include planning and coordination, design, permits, information management and mapping, notification procedures, legal, safety, construction, maintenance and reimbursement.

Target audience: Utility and highway professionals, educators, government managers

Intersection Design and Channelization Workshop

Product: Course

Date produced: 1996

Source: Northwestern University Traffic Institute

Contact: Robert K. Seyfried, Director, Transportation Engineering, Northwestern University Traffic Institute, 405 Church St., Evanston, IL 60204

Telephone/Fax: Tel: (800) 323-4011, (847) 491-5040, Fax: (847) 491-5270

E-mail/Other: Web site: <http://www.nwu.edu/traffic>

Cost/terms: Cost available on request

Description: This workshop emphasizes the principles of intersection and channelization design, identification and treatment of intersection deficiencies, and redesign of existing intersections. Includes lecture sessions and discussions of intersection design case studies.

Target audience: Design and traffic engineers involved in intersection design

Parking Facility Planning and Design Workshop

Product: Course

Date produced: 1995

Source: Northwestern University Traffic Institute

Contact: Robert K. Seyfried, Director, Transportation Engineering, Northwestern University Traffic Institute, 405 Church St., Evanston, IL 60204

Telephone/Fax: Tel: (800) 323-4011, (847) 491-5040, Fax: (847) 491-5270

E-mail/Other: Web Site: <http://www.nwu.edu/traffic>

Cost/terms: Cost available on request

Description: This workshop provides participants with state-of-the-art methods, planning practices, and design techniques for more effectively managing existing parking facilities and for planning and design of new off-street parking facilities.

Target audience: Transportation engineers and planners, parking design engineers

Pedestrian Planning and Facilities Workshop

Product: Course

Date produced: 1994

Source: Northwestern University Traffic Institute

Contact: Robert K. Seyfried, Director, Transportation Engineering, Northwestern Univer-

sity Traffic Institute, 405 Church St.,
Evanston, IL 60204
Telephone/Fax: Tel: (800) 323-4011, (847)
491-5040, Fax: (847) 491-5270
E-mail/Other: Web site: [http://
www.nwu.edu/traffic](http://www.nwu.edu/traffic)

Cost/terms: Cost available on request

Description: This workshop provides information, skills and tools that needed to plan and design pedestrian facilities and programs in local communities. The workshop includes lectures and discussions, case studies and class projects.

Target audience: Local and state engineers, planners, government officials

Roadway Design Workshop

Product: Course

Date produced: 1996

Source: Northwestern University Traffic Institute

Contact: Robert K. Seyfried, Director, Transportation Engineering, Northwestern University Traffic Institute, 405 Church St., Evanston, IL 60204

Telephone/Fax: Tel: (800) 323-4011, (847)
491-5040, Fax: (847) 491-5270

E-mail/Other: Web site: [http://
www.nwu.edu/traffic](http://www.nwu.edu/traffic)

Cost/terms: Cost available on request

Description: This workshop is based on the material contained in the metric AASHTO Roadside Design Guide. This new publication provides updated information on the analysis and design of roadside conditions, design of roadside and median barriers and crash cushions, and the economic analysis of alternative treatments. Example projects are used to give participants the opportunity to apply the principles and techniques discussed in the course.

Target audience: Traffic operations, design and maintenance engineers

Roadway Fundamentals for Municipal Officials

Product: Manual

Date produced: 1995

Source: Adapted from Cornell Local Roads Program (New York)

Contact: Peter Coughlan, Director, Maine Local Roads Center, Maine DOT Technical Services Division, 16 State House Station, Augusta, ME 04333-0016

Telephone/Fax: Tel: (207) 287-2152, Fax: (207) 287-3292

E-mail/Other: E-mail:

peter.coughlan@state.me.us

Cost/terms: Free to T² Centers, \$25 to all others, may duplicate with proper credits

Description: This manual presents the basic concepts of roadway design and construction. It covers traffic, drainage, materials, asphalts, paving and road geometry.

Target audience: Municipal officials, road commissioners, foremen

Safety Design for Streets and Highways

Product: Course

Date produced: 1988 (updated 1994)

Source: Transportation Training Division, Texas Engineering Extension Service (TTD TEEX)

Contact: Nelson Evans, Head, TTD TEEX, The Texas A & M University System, College Station, TX 77843-8000

Telephone/Fax: Tel: (409) 845-4457, Fax: (409) 862-4768

E-mail/Other: E-mail:

trevans@teexnet.tamu.edu

Cost/terms: Available on request

Description: This course covers the elements of street and highway design that impact operational safety on these facilities. It identifies components that influence the safety of operations and presents the latest technology relative to the design and operation of these elements.

Target audience: Technical personnel in traffic operations

Subsurface Utility Engineering - A Proven Solution

Product: Videocassette (16 min.)

Date produced: 1995

Source: Federal Highway Administration (FHWA)

Contact: Paul Scott, HNG-10, FHWA Office of Engineering, 400 7th St., SW, Room 3134, Washington, DC 20590

Telephone/Fax: Tel: (202) 366-4104, Fax: (202) 366-3988

Cost/terms: Free

Description: This video describes the proper use of subsurface utility engineering, project application, benefits, and other public works applications.

Target audience: FHWA, state and local agencies, public and private utilities personnel, universities

Subsurface Utility Engineering Handbook

Product: Manual

Date produced: 1995

Source: Federal Highway Administration (FHWA)

Contact: Paul Scott, HNG-10, FHWA Office of Engineering, 400 7th St., SW, Room 3134, Washington, DC 20590

Telephone/Fax: Tel: (202) 366-4104, Fax: (202) 366-3988

Cost/terms: Free copies available upon request

Description: Subsurface Utility Engineering (SUE) is an engineering service that incorporates new and existing technologies so that underground utility facilities can be accurately located and mapped during the early development of a highway project. This allows cost-effective design decisions to be made and results in savings to highway agencies and utilities. The SE Handbook answers some basic questions about SUE, such as: What is SUE? Why use SUE? What does SUE cost? Who provides SUE? Who uses SUE? What is in the future for SUE? It also provides some sample SUE documents, such as a sample state request for letters of interest, a sample state request for proposals, and a sample state/consultant agreement.

Target audience: Utility and highway professionals

Summary Report: The Breakaway Timber Utility Pole - A Survivable Alternative

Product: Manual

Date produced: 1993

Source: Federal Highway Administration (FHWA)

Contact: Paul Scott, HNG-10, FHWA Office of Engineering, 400 7th St., SW, Room 3134, Washington, DC 20590

Telephone/Fax: Tel: (202) 366-4104, Fax: (202) 366-3988

Cost/terms: Free

Description: This summary report provides information about the history, design, site selection, installation and evaluation of breakaway timber utility poles in Massachusetts.

Target audience: State and local highway agencies, utility companies, universities

Upgrading Your Roads

Product: Manual

Date produced: Revised 1993

Source: Cornell Local Roads Program (CLRP)

Contact: Amy Dreher, Resource and Information Specialist, CLRP, 416 Riley-Robb Hall, Ithaca, NY 14853-5701

Telephone/Fax: Tel: (607) 255-8033, Fax: (607) 255-4080

E-mail/Other: E-mail: clrp@cornell.edu

Cost/terms: Free to New York State highway and public works officials; \$5 to others

Description: This course provides a strategy for establishing a long-range plan to upgrade road systems. It teaches how to diagnose failing pavements, pavement management, and how to identify rehabilitation and construction options for pavements and gravel roads.

Target audience: Highway officials, public works personnel

Urban Street Design

Product: Course

Date produced: 1994

Source: Transportation Training Division, Texas Engineering Extension Service (TTD TEEX)

Contact: Nelson Evans, Head, TTD TEEX, The Texas A & M University System, College Station, TX 77843-8000

Telephone/Fax: Tel: (409) 845-4457, Fax: (409) 862-4768

E-mail/Other: E-mail:

trevans@teexnet.tamu.edu

Cost/terms: Available on request

Description: This course covers the planning of urban street systems, review of intersection design principles, medians, drainage design and functional design guidelines.

Target audience: Recent engineering graduates with minimal experience, experienced technicians or engineers with minimal experience in highway and/or safety design

Risk Management



Accident Reconstruction for Traffic Managers

Product: Course

Date produced: 1996

Source: Northwestern University Traffic Institute

Contact: Robert K. Seyfried, Director, Transportation Engineering, Northwestern University Traffic Institute, 405 Church St., Evanston, IL 60204

Telephone/Fax: Tel: (800) 323-4011, (847)

491-5040, Fax: (847) 491-5270

E-mail/Other: Web Site: <http://www.nwu.edu/traffic>

Cost/terms: Cost available on request

Description: This five-day workshop is intended to provide traffic engineers with knowledge and skills to conduct an independent investigation to determine how a traffic accident occurred, and assess the potential involvement of the roadway design and traffic operational factors in accident causation.

Target audience: Traffic engineers and other technical personnel who have a strong background in engineering or physics

Claims, Pains and Automobiles: Municipal Roads and Tort Liability

Product: Text

Date produced: 1995

Source: Maine Local Roads Center

Contact: Peter Coughlan, Director, Maine Local Roads Center, Maine DOT Technical Services Division, 16 State House Station, Augusta, ME 04333-0016

Telephone/Fax: Tel: (207) 287-2152, Fax: (207) 287-3292

E-mail/Other: E-mail:

peter.coughlan@state.me.us

Cost/terms: Free to T² Centers, \$25 to all

others, may duplicate with proper credits

Description: This notebook explains in understandable and practical terms what realistic steps can be taken to reduce the possibility of a successful law suit against you and the municipality for which you work. Subjects include the following: local highway law; the Maine Tort Claims Act; liability in roadway work zones; liability with road signs, signals, etc.; and how to reduce the possibility of a successful claim.

Target audience: Municipal officials, road commissioners, public works personnel

The Deposition

Product: Videocassette (17 min.)

Date produced: 1991

Source: Pennsylvania Department of Transportation

Contact: Pennsylvania Department of Transportation Employees Library, Forum Place, 555 Walnut St., 8th Floor, Harrisburg, PA 17101-1900

Telephone/Fax: Tel: (717) 787-6527, Fax: (717) 772-8282

Cost/terms: \$35

Description: This videotape shows how to provide an expert deposition. It is a companion piece to "Transportation Employee as a Witness" videocassette (AV#01367).

Target audience: Engineers

Extra Eyes on Maintenance

Product: Videocassette (32 min.)

Date produced: 1988

Source: Pennsylvania Department of Transportation

Contact: Pennsylvania Department of Transportation Employees Library, Forum Place, 555 Walnut St., 8th Floor, Harrisburg, PA 17101-1900

Telephone/Fax: Tel: (717) 787-6527, Fax: (717) 772-8282

Cost/terms: \$35

Description: This videotape shows how everybody can help maintenance workers reduce the chances of a tort suit (AV#00734).

Target audience: Supervisors, workers

Handbook on Accident Reconstruction

Product: Manual Course

Date produced: 1993

Source: Department of Civil Engineering, West Virginia University

Contact: Ronald W. Eck, Professor of Civil Engineering, West Virginia University, P.O. Box 6103, Morgantown, WV 26506-6103
Telephone/Fax: Tel: (304) 293-3031 ext. 627, Fax: (304) 293-7109

E-mail/Other: E-mail: blanken@cemr.wvu.edu

Cost/terms: \$20, make check out to National Transportation Center - West Virginia University

Description: This manual provides an introduction and overview of the accident investigation and reconstruction process. At-scene and after-accident investigation and data collection are discussed. Collection techniques for roadway, vehicle, and other accident-related data are described. Common techniques used in accident reconstruction are presented along with underlying assumptions and limitations. Key issues involved in reconstruction of commercial vehicle, motorcycle and pedestrian accidents are also outlined.

Target audience: Traffic engineers, law enforcement personnel, claims investigators, attorneys

Legal Liability Workshop

Product: Course

Date produced: 1995

Source: Northwestern University Traffic Institute

Contact: Robert K. Seyfried, Director, Transportation Engineering, Northwestern University Traffic Institute, 405 Church St., Evanston, IL 60204

Telephone/Fax: Tel: (800) 323-4011, (847) 491-5040, Fax: (847) 491-5270

E-mail/Other: Web Site: <http://www.nwu.edu/traffic>

Cost/terms: Cost available on request

Description: This three-day workshop is intended to provide information to highway design and traffic operations and safety engineers about their legal responsibilities to the motoring public. Increased knowledge of tort liability law can eliminate unjustified fears, improve decision-making, and lower potential legal liabilities of the highway agency and the individual engineer. Participants in this workshop also receive guidance in preparing and presenting courtroom defenses, including information needed to prepare a defense and the role of the engineer in the courtroom.

Target audience: Engineers and administrators who work for city, county and state highway and traffic engineering agencies, and consultants and others involved in the design of highway facilities and traffic operation decisions.

Right-to-Know Series

Product: Videocassette series

Date produced: 1989

Source: Pennsylvania Department of Transportation

Contact: Pennsylvania Department of Transportation Employees Library, Forum Place, 555 Walnut St., 8th Floor, Harrisburg, PA 17101-1900, Telephone/Fax: Tel: (717) 787-6527, Fax: (717) 772-8282

Cost/terms: \$35

Description: This three part series provides detailed information on the Right-to-Know Act. Part 1: The Workplace (AV#01037); Part 2: The Garage (AV#01038); Part 3: The Highway (AV#01039).

Target audience: All personnel, garage and highway employees

Risk Management

Product: Videocassette (9 min.)

Date produced: 1995

Source: Salt Institute

Contact: Andrew C. Briscoe III, Director of

Public Policy, Salt Institute, 700 N. Fairfax St., Suite 600, Alexandria, VA 22314-2040
Telephone/Fax: Tel: (703) 549-4648, Fax: (703) 548-2194

E-mail/Other: Web site: <http://www.saltinstitute.org>

Cost/terms: \$20

Description: This video shows the public, political decision makers and key public works officials that winter storms, snow and ice can add up to disastrous and deadly conditions. Video clips from around the country provide visual reinforcement and help clarify the need for resources and tools to perform good highway winter maintenance.

Target audience: Highway agencies, risk managers, political decision makers

Risk Management to Reduce Highway Tort Liability

Product: Course

Date produced: 1990

Source: Transportation Training Division, Texas Engineering Extension Service (TTD TEEX)

Contact: Nelson Evans, Head, TTD TEEX, The Texas A & M University System, College Station, TX 77843-8000

Telephone/Fax: Tel: (409) 845-4457, Fax: (409) 862-4768

E-mail/Other: E-mail: trevans@teexnet.tamu.edu

Cost/terms: Available on request

Description: This course covers the key concepts of risk management and activities related to potential and actual law suits, including pre-trial, trial and post-trial activities. The course includes a mock trial workshop.

Target audience: Personnel responsible for road design, construction, maintenance, and attorneys

Risk Management: Tort Litigation

Product: Videocassette (20 min.)

Date produced: 1984

Source: Pennsylvania Department of Transportation

Contact: Pennsylvania Department of Transportation

Employees Library, Forum Place, 555 Walnut St., 8th Floor, Harrisburg, PA 17101-1900

Telephone/Fax: Tel: (717) 787-6527, Fax: (717) 772-8282

Cost/terms: \$35

Description: This videotape covers involvement in tort claims and is designed to outline in easy-to-understand terms and concepts the things that get departments in tort claims. It also describes methods to avoid such claims. The video follows a new assistant county manager as he is briefed on risk management procedures (AV#00681).

Target audience: Managers, engineers, clerical staff

Tort Awareness

Product: Videocassette (34 min.)

Date produced: 1988

Source: Pennsylvania Department of Transportation

Contact: Pennsylvania Department of Transportation Employees Library, Forum Place, 555 Walnut St., 8th Floor, Harrisburg, PA 17101-1900

Telephone/Fax: Tel: (717) 787-6527, Fax: (717) 772-8282

Cost/terms: \$35

Description: This videotape provides general information on tort suits, and how they impact the department. (AV#00733).

Target audience: General interest

Torts Are Everybody's Business

Product: Videocassette (5 min.)

Date produced: 1992

Source: Pennsylvania Department of Transportation

Contact: Pennsylvania Department of Transportation Employees Library, Forum Place, 555 Walnut St., 8th Floor, Harrisburg, PA 17101-1900

Telephone/Fax: Tel: (717) 787-6527, Fax: (717) 772-8282

Cost/terms: \$35

Description: This videotape provides an introduction to tort and its significance for the Pennsylvania Department of Transportation (AV#01518).

Target audience: New employees

Transportation Employee as a Witness

Product: Videocassette (24 min.)

Date produced: 1990

Source: Pennsylvania Department of Transportation

Contact: Pennsylvania Department of Transportation Employees Library, Forum Place, 555 Walnut St., 8th Floor, Harrisburg, PA 17101-1900

Telephone/Fax: Tel: (717) 787-6527, Fax: (717) 772-8282

Cost/terms: \$35

Description: This videotape is designed for an employee who is scheduled to appear as a witness in court. It presents procedures, demeanor and expected conduct (AV#01170).

Target audience: Engineers

Roads



Asphalt Cold-Mix Recycling

Product: Manual

Date produced: 1983

Source: Asphalt Institute

Contact: Ross Bentsen, Director of Education, Asphalt Institute, Research Park Drive, P.O. Box 14052, Lexington, KY 40512-4052
Telephone/Fax: Tel: (606) 288-4983

Cost/terms: \$8

Description: This manual covers methods of recycling asphalt pavements using either emulsified asphalt or hot asphalt cement. It describes the process of removing old pavement, storing and processing reclaimed materials, and designing and constructing recycled pavements using both in-place and central plant mixing.

Target audience: Engineers

Asphalt Hot-Mix Recycling

Product: Manual

Date produced: 1986

Source: Asphalt Institute

Contact: Ross Bentsen, Director of Education, Asphalt Institute, Research Park Drive, P.O. Box 14052, Lexington, KY 40512-4052
Telephone/Fax: Tel: (606) 288-4983

Cost/terms: \$8

Description: This manual contains comprehensive data on hot-mix recycling of asphalt pavements, including materials evaluation, recycling agents, design, plant production, construction and aggregate temperature determination.

Target audience: Engineers

Asphalt in Pavement Maintenance

Product: Manual

Date produced: 1996, third edition

Source: Asphalt Institute

Contact: Ross Bentsen, Director of Educa-

tion, Asphalt Institute, Research Park Drive, P.O. Box 14052, Lexington, KY 40512-4052
Telephone/Fax: Tel: (606) 288-4983

Cost/terms: \$12

Description: The Maintenance Manual provides useful, practical information to assist owners of all types of pavements with achieving long life from their pavement investment. Topics addressed in the manual include important maintenance considerations; asphalt materials used in pavement maintenance; descriptions of the types and causes of various distresses encountered in asphalt and concrete pavements; the proper maintenance procedures for repairing pavement distresses; and guidelines for designing patching mixtures (MS-16).

Target audience: Engineers, contractors

Asphalt Overlays for Highway and Street Rehabilitation

Product: Manual

Date produced: 1983

Source: Asphalt Institute

Contact: Ross Bentsen, Director of Education, Asphalt Institute, Research Park Drive, P.O. Box 14052, Lexington, KY 40512-4052
Telephone/Fax: Tel: (606) 288-4983

Cost/terms: \$12

Description: This manual is a guide to the design and construction of asphalt overlays and the evaluation of pavements prior to overlaying. It is applicable to overlays of asphalt and concrete pavements, including nondestructive testing for pavement evaluation (MS-17).

Target audience: Engineers, designers

Asphalt Overlays for Rehabilitation

Product: Slide-tape (33 min.)

Date produced: 1986

Source: Asphalt Institute

Contact: Ross Bentsen, Director of Education, Asphalt Institute, Research Park Drive, P.O. Box 14052, Lexington, KY 40512-4052
Telephone/Fax: Tel: (606) 288-4983

Cost/terms: \$120

Description: This presentation demonstrates asphalt overlay design techniques for overlaying asphalt and concrete pavements.

Target audience: Those responsible for pavement rehabilitation programs

Asphalt-PASER Manual

Product: Manual

Date produced: 1989

Source: Wisconsin Transportation Information Center (TIC)

Contact: Mercy Ranum, Program Assistant, Wisconsin TIC, University of Wisconsin-Madison, 432 N. Lake St., Room 725A, Madison, WI 53706

Telephone/Fax: Tel: (608) 262-0422, Fax: (608) 263-3160

Cost/terms: Single copies to T² Centers no charge, multiple copies \$2 each

Description: Presents asphalt pavement distresses and failures using easy to follow photographs along with environmental and structural causes. It classifies the distresses and failures on a scale of 1-10 and presents the appropriate repair and rehabilitation techniques for each rating.

Target audience: Local road personnel, local officials

Asphalt Pavement Maintenance Workshop

Product: Course Materials

Date produced: 1991

Source: North Carolina T² Program

Contact: James B. Martin, Associate Director for Programs, Institute for Transportation Research and Education, North Carolina State University, Campus Box 8601, Raleigh, NC 27695-8601

Telephone/Fax: Tel: (919) 515-8033, Fax: (919) 515-8898

Cost/terms: Free loan; may duplicate

Description: This course covers a variety of topics dealing with current practices in

asphalt pavement maintenance operations, including pavement evaluation, asphalt mix materials, hot plant mix production and pavement construction methods, and routine pavement maintenance techniques.

Target audience: Street and highway maintenance foremen, pavement maintenance supervisors, street superintendents

Asphalt Pavement Technology and Inspection Workshop

Product: Course Materials

Date produced: 1991

Source: North Carolina T² Program

Contact: James B. Martin, Associate Director for Programs, Institute for Transportation Research and Education, North Carolina State University, Campus Box 8601, Raleigh, NC 27695-8601

Telephone/Fax: Tel: (919) 515-8033, Fax: (919) 515-8898

Cost/terms: Free loan; may duplicate

Description: This course covers asphalt materials, inspection techniques and basic principles and state-of-the-art testing procedures.

Target audience: Engineers, technicians, inspectors

Asphalt Pavement Thickness Design

Product: Factsheet

Date produced: 1981

Source: Asphalt Institute

Contact: Ross Bentsen, Director of Education, Asphalt Institute, Research Park Drive, P.O. Box 14052, Lexington, KY 40512-4052
Telephone/Fax: Tel: (606) 288-4983

Cost/terms: \$4

Description: A simplified and abridged version of the ninth edition of the Asphalt Institute's Thickness Design Manual. Contains ten tables and information on traffic considerations, subgrade soils, pavement materials, thickness selection and compaction (IS-181).

Target audience: Pavement engineers, designers, contractors

Asphalt Surface Treatments — Construction Techniques

Product: Manual

Date produced: 1986

Source: Asphalt Institute

Contact: Ross Bentsen, Director of Education, Asphalt Institute, Research Park Drive, P.O. Box 14052, Lexington, KY 40512-4052
Telephone/Fax: Tel: (606) 288-4983

Cost/terms: \$7

Description: This publication details procedures for asphalt surface treatments. The contents include items to be considered, inspection of existing pavements, equipment, pavement preparation, surface treatment design, application and precautions.

Target audience: Maintenance personnel

Asphalt Surface Treatments — Specifications

Product: Factsheet

Date produced: 1986

Source: Asphalt Institute

Contact: Ross Bentsen, Director of Education, Asphalt Institute, Research Park Drive, P.O. Box 14052, Lexington, KY 40512-4052
Telephone/Fax: Tel: (606) 288-4983

Cost/terms: \$6

Description: This publication contains information on specifications for single and multiple surface treatments with asphalt, including general requirements, materials, construction, preparation of surfaces, equipment, sampling, testing methods and traffic control and safety.

Target audience: Maintenance personnel

Balancing Production Rates in Hot-Mix Asphalt Operations

Product: Manual

Date produced: 1996

Source: National Asphalt Pavement Association (NAPA)

Contact: NAPA, 5100 Forbes Blvd., Lanham, MD 20706

Telephone/Fax: Tel: (301) 731-4748, Fax: (301) 731-4621

E-mail/Other: E-mail: napa@hotmix.org, Web Site: <http://www.hotmix.org>

Cost/terms: NAPA members \$8, nonmembers \$16

Description: The construction of HMA pavements can be divided into four discreet operations: production, hauling, laydown and compaction. Developing and maintaining a balance of these operations is critical in order to produce high quality pavements at the lowest unit cost. This publication discusses the variables and presents a method to balance these operations.

Target audience: Superintendents, foremen

Budgeting for Rehabilitation

Product: Slide-tape (23 min.)

Date produced: 1986

Source: Asphalt Institute

Contact: Ross Bentsen, Director of Education, Asphalt Institute, Research Park Drive, P.O. Box 14052, Lexington, KY 40512-4052
Telephone/Fax: Tel: (606) 288-4983

Cost/terms: \$115

Description: This presentation focuses on the problems of deteriorating streets, roads and highways in the U.S. and the reasons behind the nation's lagging rehabilitation program. It presents pavement life cycles, rehabilitation options and strategies, and the real cost of deferring necessary rehabilitation.

Target audience: Community leaders and elected officials

Building or Replacing Intersections with Concrete

Product: Videocassette (8 min.)

Date produced: 1993

Source: American Concrete Pavement Association

Contact: Lon D. Hawbaker, Director-Local Roads and Parking Areas, ACPA, 5420 Old Orchard Rd., Suite A100, Skokie, IL 60077-1059

Telephone/Fax: Tel: (847) 966-2272, Fax: (847) 966-9970, Orders: (800) 868-6733

E-mail/Other: E-mail:

lhawbaker@pavement.com, Web Site: <http://www.pavement.com>

Cost/terms: \$18.95

Description: This videocassette includes

construction sequencing suggestions (including fast track) for rapid pavement replacement, minimizing traffic disruption (Code No. VC331P).

Target audience: Design, planning and maintenance engineers

Cause and Prevention of Stripping in Asphalt Pavements (Second Edition)

Product: Factsheet

Date produced: 1987

Source: Asphalt Institute

Contact: Ross Bentsen, Director of Education, Asphalt Institute, Research Park Drive, P.O. Box 14052, Lexington, KY 40512-4052
Telephone/Fax: Tel: (606) 288-4983

Cost/terms: \$4

Description: This publication describes stripping as applicable to asphalt pavements. It explains the causes and suggests measures for minimizing the occurrence and solving the problem.

Target audience: Pavement engineers

Concrete-PASER Manual

Product: Manual

Date produced: 1989

Source: Wisconsin Transportation Information Center (TIC)

Contact: Mercy Ranum, Program Assistant, Wisconsin TIC, University of Wisconsin-Madison, 432 N. Lake St., Room 725A, Madison, WI 53706

Telephone/Fax: Tel: (608) 262-0422, Fax: (608) 263-3160

Cost/terms: Single copies to T² Centers no charge, multiple copies \$2 each

Description: Presents concrete pavement distresses and failures using easy to follow photographs along with environmental and structural causes. It classifies the distresses and failures on a scale of 1-10 and presents the appropriate repair and rehabilitation techniques for each rating.

Target audience: Local road personnel, local officials

Concrete Pavement Rehabilitation Package

Product: Manual

Date produced: 1993, updated 1996

Source: American Concrete Pavement Association (ACPA)

Contact: Lon D. Hawbaker, Director-Local Roads and Parking Areas, ACPA, 5420 Old Orchard Rd., Suite A100, Skokie, IL 60077-1059

Telephone/Fax: Tel: (847) 966-2272, Fax:

(847) 966-9970, Orders: (800) 868-6733

E-mail/Other: E-mail:

lhawbaker@pavement.com, Web Site: <http://www.pavement.com>

Cost/terms: \$90, discounts available

Description: This package includes all of ACPA's technical bulletins dealing with pavement rehabilitation as well as eight other publications covering all facets of concrete pavements — planning, design, construction and maintenance (Code No. TB100P).

Target audience: Planning, design, construction, and maintenance personnel

Crack Sealing

Product: Videocassette (8 min.)

Date produced: 1987

Source: Pennsylvania Department of Transportation

Contact: Pennsylvania Department of Transportation Employees Library, Forum Place, 555 Walnut St., 8th Floor, Harrisburg, PA 17101-1900

Telephone/Fax: Tel: (717) 787-6527, Fax: (717) 772-8282

Cost/terms: \$35

Description: This videocassette provides a review of department policies on crack sealing of bituminous pavements. It covers equipment, materials and application requirements (AV#00519).

Target audience: Maintenance crews, supervisors

Creating an Artistic Concrete Intersection

Product: Reprint

Date produced: 1996

Source: American Concrete Pavement Association

Contact: Lon D. Hawbaker, Director-Local

Roads and Parking Areas, ACPA, 5420 Old Orchard Rd., Suite A100, Skokie, IL 60077-1059

Telephone/Fax: Tel: (847) 966-2272, Fax: (847) 966-9970, Orders: (800) 868-6733

E-mail/Other: E-mail:

lhawbaker@pavement.com, Web Site: <http://www.pavement.com>

Cost/terms: \$1.20, discounts available

Description: This color reprint discusses the artistic process of coloring concrete that was showcased in Denver on Earth Day, 1995. The city installed this unique multi-colored concrete intersection to demonstrate the environmental advantages of concrete pavements. The art work in the intersection is called Champa Tapestry (Code No. RP315P).

Target audience: Public officials, engineers, architects

Design and Construction of Joints in Concrete Streets

Product: Manual

Date produced: 1992

Source: Portland Concrete Association/
American Concrete Pavement Association

Contact: Lon D. Hawbaker, Director-Local Roads and Parking Areas, ACPA, 5420 Old Orchard Rd., Suite A100, Skokie, IL 60077-1059

Telephone/Fax: Tel: (847) 966-2272, Fax: (847) 966-9970, Orders: (800) 868-6733

E-mail/Other: E-mail:

lhawbaker@pavement.com, Web Site: <http://www.pavement.com>

Cost/terms: \$5, discounts available

Description: This manual discusses the design and construction of jointing systems in concrete streets to ensure the structural capacity, ride quality and good pavement performance. It contains information on transverse, longitudinal and isolation joints design and construction; load transfer; sealants; spacing and keyway design; and layout (Code No. IS061P).

Target audience: City engineers, consultants

Design of Concrete Pavement for City Streets

Product: Manual

Date produced: 1992

Source: American Concrete Pavement Association

Contact: Lon D. Hawbaker, Director-Local Roads and Parking Areas, ACPA, 5420 Old Orchard Rd., Suite A100, Skokie, IL 60077-1059

Telephone/Fax: Tel: (847) 966-2272, Fax: (847) 966-9970, Orders: (800) 868-6733

E-mail/Other: E-mail:

lhawbaker@pavement.com, Web Site: <http://www.pavement.com>

Cost/terms: \$3.60, discounts available

Description: This manual covers the design of concrete pavements for long life and economy, concrete quality, subgrade strength, thickness, design, traffic and design life. It also contains simplified thickness design tables (Code No. IS184P).

Target audience: Engineers, public works directors

Fast Track Concrete Pavements

Product: Manual

Date produced: 1994

Source: American Concrete Pavement Association

Contact: Lon D. Hawbaker, Director-Local Roads and Parking Areas, ACPA, 5420 Old Orchard Rd., Suite A100 Skokie, IL 60077-1059

Telephone/Fax: Tel: (847) 966-2272, Fax: (847) 966-9970, Orders: (800) 868-6733

E-mail/Other: E-mail:

lhawbaker@pavement.com, Web Site: <http://www.pavement.com>

Cost/terms: \$9, discounts available

Description: New and revised technical guide on the exciting concept of placing and opening concrete pavements to traffic in hours rather than days. Discusses the concept and the materials, design and construction thought-processes needed to make it work. Contains latest information for sawing, curing and opening concrete to traffic (Code No. TB004P).

Target audience: Engineers, designers

Fixed Form Paving: A Lost Art

Product: Reprint

Date produced: 1996

Source: American Concrete Pavement Association

Contact: Lon D. Hawbaker, Director-Local Roads and Parking Areas, ACPA, 5420 Old Orchard Rd., Suite A100, Skokie, IL 60077-1059

Telephone/Fax: Tel: (847) 966-2272, Fax: (847) 966-9970, Orders: (800) 868-6733

E-mail/Other: E-mail:

lhawbaker@pavement.com, Web Site: <http://www.pavement.com>

Cost/terms: \$1.50, discounts available

Description: This reprint from Concrete Construction discusses the techniques of using fixed paving forms to hold concrete in place at the proper grade and alignment. The article reviews selecting forms, setting string line, setting forms, forming curves, placing concrete and removing forms (Code No. RP342P).

Target audience: Engineers, designers, inspectors

Full-Depth Asphalt Pavement for Parking Lots, Service Stations and Driveways (Fifth Edition)

Product: Factsheet

Source: Asphalt Institute

Contact: Ross Bentsen, Director of Education, Asphalt Institute, Research Park Drive, P.O. Box 14052, Lexington, KY 40512-4052
Telephone/Fax: Tel: (606) 288-4983

Cost/terms: \$4

Description: Points out advantages of full-depth asphalt and gives design and construction information and model specifications (IS-91).

Target audience: Pavement engineers, designers, contractors

Full-Depth Repair of Concrete Pavements

Product: Slides with script

Date produced: 1991

Source: American Concrete Pavement Association (ACPA)

Contact: Lon D. Hawbaker, Director-Local Roads and Parking Areas, ACPA, 5420 Old Orchard Rd., Suite A100
Skokie, IL 60077-1059

Telephone/Fax: Tel: (847) 966-2272, Fax: (847) 966-9970, Orders: (800) 868-6733

E-mail/Other: E-mail:

lhawbaker@pavement.com, Web Site: <http://www.pavement.com>

Cost/terms: \$160

Description: These slides present complete design and construction guidelines for the repair of joints and slabs using full-depth replacement (Code No. SS502P). A companion publication, "Guidelines for Full-Depth Repair," is available as a study reference (Code No. TB002P).

Target audience: Pavement design engineers

Gravel-PASER Manual

Product: Manual

Date produced: 1989

Source: Wisconsin Transportation Information Center (TIC)

Contact: Mercy Ranum, Program Assistant, Wisconsin TIC, University of Wisconsin-Madison, 432 N. Lake St., Room 725A, Madison, WI 53706

Telephone/Fax: Tel: (608) 262-0422, Fax: (608) 263-3160

Cost/terms: Single copies to T² Centers no charge, multiple copies \$2 each

Description: Presents gravel pavement distresses and failures using easy to follow photographs with environmental and structural causes. It classifies the distresses and failures on a scale of 1-5 and presents the appropriate repair and rehabilitation techniques for each rating.

Target audience: Local road personnel, local officials

Hot-Mix Asphalt Joint Construction

Product: Manual

Date produced: 1993

Source: National Asphalt Pavement Association (NAPA)

Contact: NAPA, 5100 Forbes Blvd., Lanham, MD 20706

Telephone/Fax: Tel: (301) 731-4748, Fax: (301) 731-4621

E-mail/Other: E-mail: napa@hotmix.org, Web Site: <http://www.hotmix.org>

Cost/terms: \$6; discounts for government agencies and educational institutions, and for quantity

Description: Good construction techniques for pavement joints enhance both the smoothness and the performance of an HMA pavement. What these techniques are and how they can be used to construct quality joints, both transverse and longitudinal, is addressed, including a review of techniques from the U.S. and other countries. Included are two types of joints, advantages and disadvantages, and construction techniques (QIP-115).

Target audience: Inspectors

Hot-Mix Asphalt Paving Handbook

Product: Manual

Date produced: 1991

Source: National Asphalt Pavement Association (NAPA)

Contact: NAPA, 5100 Forbes Blvd., Lanham, MD 20706

Telephone/Fax: Tel: (301) 731-4748, Fax: (301) 731-4621

E-mail/Other: E-mail: napa@hotmix.org, Web Site: <http://www.hotmix.org>

Cost/terms: \$25; discounts for quantity

Description: Under the sponsorship of the Transportation Research Board, NAPA, FHWA, AASHTO, FAA and the U.S. Army Corps of Engineers, NAPA developed this comprehensive handbook covering HMA project organization; mix design and job mix formulas; types of HMA manufacturing facilities; aggregate storage and handling; asphalt cement storage and distribution; batch and drum mix facility operations; surge and storage silos; emission controls; mix delivery; surface preparation; joint construction; compaction and equipment problems/solutions (PH-001).

Target audience: Inspectors, highway engineers

How to Design Full-Depth Asphalt Pavements for Streets

Product: Factsheet

Source: Asphalt Institute

Contact: Ross Bentsen, Director of Education, Asphalt Institute, Research Park Drive, P.O. Box 14052, Lexington, KY 40512-4052
Telephone/Fax: Tel: (606) 288-4983

Cost/terms: \$3

Description: Updated technology developed from multimillion-dollar AASHTO and WASHO road tests and other road experiments in the U.S. and abroad (IS-96).

Target audience: Pavement engineers, designers, contractors

How to Prevent Segregation

Product: Videocassette (26 min.)

Date produced: 1994

Source: Video University Productions, Inc.

Contact: Video University Productions, Inc., 3501 N. Happy Hollow Rd., Independence, MO 64058

Telephone/Fax: Tel: (800) 927-8444

Cost/terms: \$49

Description: This video illustrates how segregation occurs and how to prevent it in the plant and during laydown operations.

Target audience: Operations personnel, supervisors

How to Reseal Pavement Joints

Product: Reprint

Date produced: 1995

Source: American Concrete Pavement Association (ACPA)

Contact: Lon D. Hawbaker, Director-Local Roads and Parking Areas, ACPA, 5420 Old Orchard Rd., Suite A100, Skokie, IL 60077-1059

Telephone/Fax: Tel: (847) 966-2272, Fax: (847) 966-9970, Orders: (800) 868-6733

E-mail/Other: E-mail:

lhawbaker@pavement.com, Web Site: <http://www.pavement.com>

Cost/terms: \$1.50, discounts available

Description: This publication describes the five steps necessary to properly seal pavement joints. Includes special recommendations for hot-pour, silicone and performed

compression seals. Reprinted from *Concrete Repair Digest* (Code No. RP336P).
Target audience: Engineers, street superintendents, maintenance personnel

Intersection Joint Layout

Product: Manual

Date produced: 1996

Source: American Concrete Pavement Association (ACPA)

Contact: Lon D. Hawbaker, Director-Local Roads and Parking Areas, ACPA, 5420 Old Orchard Rd., Suite A100, Skokie, IL 60077-1059

Telephone/Fax: Tel: (847) 966-2272, Fax: (847) 966-9970, Orders: (800) 868-6733

E-mail/Other: E-mail:

lhawbaker@pavement.com, Web Site: <http://www.pavement.com>

Description: This first-ever publication reduces intersection joint layout to ten simple steps. Easy fold-out format shows all ten steps at once for right-angle and skewed intersection examples (Code No. IS006.01P).

Target audience: Engineers, designers, contractors

Joint and Crack Sealing and Repair for Concrete Pavements

Product: Manual

Date produced: 1993

Source: American Concrete Pavement Association (ACPA)

Contact: Lon D. Hawbaker, Director-Local Roads and Parking Areas, ACPA, 5420 Old Orchard Rd., Suite A100, Skokie, IL 60077-1059

Telephone/Fax: Tel: (847) 966-2272, Fax: (847) 966-9970, Orders: (800) 868-6733

E-mail/Other: E-mail:

lhawbaker@pavement.com, Web Site: <http://www.pavement.com>

Cost/terms: \$9, discounts available

Description: New publication provides specifics of sealing and resealing concrete pavement joints. Discusses sealant function, materials, evaluation and repair. Also covers special considerations for resealing cracks, cross-stitching and load-transfer restoration for joints (Code No. TB012P).

Joint Sealing

Product: Videocassette (13 min.)

Date produced: 1987

Source: Pennsylvania Department of Transportation

Contact: Pennsylvania Department of Transportation Employees Library, Forum Place, 555 Walnut St., 8th Floor, Harrisburg, PA 17101-1900

Telephone/Fax: Tel: (717) 787-6527, Fax: (717) 772-8282

Cost/terms: \$35

Description: This videocassette provides a review of department policies on joint sealing. It covers equipment, materials and application requirements for various rigid pavement types (AV#00519).

Target audience: Maintenance crews, supervisors

Manual Pothole Patching

Product: Videocassette (19 min.)

Date produced: 1991

Source: Pennsylvania Department of Transportation

Contact: Pennsylvania Department of Transportation Employees Library, Forum Place, 555 Walnut St., 8th Floor, Harrisburg, PA 17101-1900

Telephone/Fax: Tel: (717) 787-6527, Fax: (717) 772-8282

Cost/terms: \$35

Description: This videocassette provides a review of department policies on pothole patching (AV#01345).

Target audience: Maintenance crews, supervisors

Microsurfacing...Use Application and Inspection

Product: Videocassette (1 hr., 45 min.)

Date produced: 1994

Source: Video University Productions, Inc.

Contact: Video University Productions, Inc., 3501 N. Happy Hollow Rd., Independence, MO 64058

Telephone/Fax: Tel: (800) 927-8444

Cost/terms: \$89

Description: This video explains how microsurfacing is applied, materials used

and crew requirements.

Target audience: Operations personnel, supervisors

Pavement Maintenance with Asphalt

Product: Slide-tape (59 min.)

Date produced: 1989

Source: Asphalt Institute

Contact: Ross Bentsen, Director of Education, Asphalt Institute, Research Park Drive, P.O. Box 14052, Lexington, KY 40512-4052
Telephone/Fax: Tel: (606) 288-4983

Cost/terms: \$225

Description: This slide-tape presentation is based on the Asphalt Institute's manual, *Asphalt in Pavement Maintenance*. The presentation identifies the types and causes of pavement defects and depicts the various techniques used to repair these defects.

Target audience: Those responsible or involved in pavement maintenance programs

Pavement Maintenance Workshop for State and Local Agencies

Product: Course

Date produced: 1996

Source: ERES Consultants, Inc.

Contact: ERES Consultants, Inc., 505 W. University Ave., Champaign, IL 61820-3915
Telephone/Fax: Tel: (888) FOR-ERES, Fax: (217) 356-3088

E-mail/Other: E-mail:

mjlw@eres.mhs.compuserve.com, Web Site: <http://www.eresnet.com>

Cost/terms: Contact ERES

Description: This workshop stresses the importance of pavement maintenance and highlights the latest research in the maintenance field. The following aspects of each maintenance activity are addressed: purpose and objectives of the maintenance activity; selection of appropriate materials; determination of required resources; cost-effectiveness of the maintenance activity; effectiveness of the maintenance activity; and summary of SHRP findings.

Target audience: Highway officials, maintenance personnel, public officials

Pavement Management Educational Video Library Series

Product: Videocassette series

Source: Deighton Associates

Contact: Vicki Deighton, President, Deighton Associates Limited, 112 King St. E., Bowmanville, Ontario L1C 1N5
CANADA

Telephone/Fax: Tel: (905) 697-2644, Fax: (905) 697-2645

Description: This library of videocassettes breaks the issues of roadway management into smaller sections. The videos are approximately 30 minutes and are accompanied with a brochure and technical guide. Titles include: *Pavement Management Systems for Elected Officials and Administrators*, *What Is a Pavement Management System?*, *Pavement Condition*, *Pavement Performance*, *Treatments and Triggering*, *Pavement Economics*, *Prioritization and Optimization*, *Databases*, and *PMS Implementation*, *A Case Study: South Dakota PMS*.

Target audience: Technical and non-technical staff, agencies, elected officials

A Pavement Rating System for Low-Volume Asphalt Roads

Product: Factsheet

Date produced: 1982

Source: Asphalt Institute

Contact: Ross Bentsen, Director of Education, Asphalt Institute, Research Park Drive, P.O. Box 14052, Lexington, KY 40512-4052
Telephone/Fax: Tel: (606) 288-4983

Cost/terms: \$3

Description: This publication describes a rating system useful to agencies responsible for maintaining roads and streets. It details the assignment of numerical values to types of pavement distress, taking into account the extent and seriousness of the defect. It contains a suggested pavement rating form and photographic illustrations of the various types of distress.

Target audience: Maintenance personnel

Pavement Smoothness

Product: Manual

Date produced: 1993

Source: National Asphalt Pavement Association (NAPA)

Contact: NAPA, 5100 Forbes Blvd., Lanham, MD 20706

Telephone/Fax: Tel: (301) 731-4748, Fax: (301) 731-4621

E-mail/Other: E-mail: napa@hotmix.org, Web Site: <http://www.hotmix.org>

Cost/terms: \$7; discounts for government agencies and educational institutions, and for quantity

Description: Smooth pavements increase roadway safety, vehicle operating speeds, ride quality, driver comfort, vehicle behavior (breaking, steering and control) and lower vehicle operating costs. In addition, smooth pavements provide long-term pavement performance and reduce annual pavement maintenance costs. This publication covers these factors and outlines techniques for achieving smoothness (IS-111).

Target audience: Inspectors

Paving Techniques

Product: Videocassette (37 min.)

Date produced: 1994

Source: Video University Productions, Inc.

Contact: Video University Productions, Inc., 3501 N. Happy Hollow Rd., Independence, MO 64058

Telephone/Fax: Tel: (800) 927-8444

Cost/terms: \$49

Description: This video discusses how road maintenance costs skyrocket, truck and passenger car maintenance jumps and oil consumption climbs on poorly surfaced roads. This video is a presentation given at Colorado's annual asphalt paving seminar in 1992 by Don Brock, Ph.D., president of Astec Industries, Inc.

Target audience: Operations personnel, supervisors

Placing Asphalt Hot-Mix

Product: Slide-tape (20 min.)

Date produced: 1986

Source: Asphalt Institute

Contact: Ross Bentsen, Director of Education, Asphalt Institute, Research Park Drive, P.O. Box 14052, Lexington, KY 40512-4052

Telephone/Fax: Tel: (606) 288-4983

Cost/terms: \$120

Description: This slide-tape program describes the necessary steps for quality paving with asphalt plant mix. It is intended as an instructional aid for the paving inspector and contractor's work force and groups dealing with asphalt paving technology. It includes 80 color slides and a 20 minutes audio tape.

Target audience: Inspectors

Principles of Construction of Hot-Mix Asphalt Pavements

Product: Manual

Date produced: 1983

Source: Asphalt Institute

Contact: Ross Bentsen, Director of Education, Asphalt Institute, Research Park Drive, P.O. Box 14052, Lexington, KY 40512-4052

Telephone/Fax: Tel: (606) 288-4983

Cost/terms: \$18

Description: A valuable reference for all asphalt pavement construction personnel. This manual was prepared by the Asphalt Institute under contract to the U.S. Federal Highway Administration to describe and emphasize the essential quality control procedures for the construction of asphalt pavements.

Target audience: Pavement engineers, designers, technicians, inspectors and maintenance personnel

Proper Use of Isolation and Expansion Joints in Concrete Pavements

Product: Manual

Date produced: 1992

Source: American Concrete Pavement Association (ACPA)

Contact: Lon D. Hawbaker, Director-Local Roads and Parking Areas, ACPA, 5420 Old Orchard Rd., Suite A100, Skokie, IL 60077-1059

Telephone/Fax: Tel: (847) 966-2272, Fax: (847) 966-9970, Orders: (800) 868-6733

E-mail/Other: E-mail:

lhawbaker@pavement.com, Web Site: <http://www.pavement.com>

Cost/terms: \$1, discounts available

Description: This manual discusses the correct uses for isolation and expansion joints in concrete pavements. It contains concise details for the use, location and construction of isolation joints and where not to use expansion joints (Code No. IS400P).

Target audience: Engineers, consultants

Recycling Roads with Asphalt Emulsions

Product: Videocassette (22 min.)

Date produced: 1986

Source: Asphalt Institute

Contact: Ross Bentsen, Director of Education, Asphalt Institute, Research Park Drive, P.O. Box 14052, Lexington, KY 40512-4052
Telephone/Fax: Tel: (606) 288-4983

Cost/terms: \$49

Description: This video highlights the methods and materials used to recycle low-volume roads, materials in constructing asphalt-strengthened pavement bases. Both central-plant and in-place operations are shown, focusing on the advantages of cold-mix recycling as a cost-effective road rehabilitation and improvement option.

Target audience: Engineers, state and local government officials

Rehabilitation of Portland Cement Concrete Pavements Using Hot-Mix Asphalt Overlays

Product: Videocassette (18 min.)

Source: Asphalt Institute

Contact: Ross Bentsen, Director of Education, Asphalt Institute, Research Park Drive, P.O. Box 14052, Lexington, KY 40512-4052
Telephone/Fax: Tel: (606) 288-4983

Cost/terms: \$39

Description: This video, jointly produced with the National Asphalt Pavement Association, illustrates four methods for preparing PCC pavements for an asphalt overlay: crack and seat, break and seat, rubblizing, and sawcut and seal. Each of these procedures has proven effective in preventing reflective cracking in hot-mix asphalt overlays. The video presents the construction processes

and basic overlay design techniques.

Target audience: Engineers, designers, contractors

Rehabilitation of Portland Cement Concrete Pavements Using Hot-Mix Asphalt Overlays

Product: Videocassette

Date produced: 1993

Source: National Asphalt Pavement Association (NAPA)

Contact: NAPA, 5100 Forbes Blvd., Lanham, MD 20706

Telephone/Fax: Tel: (301) 731-4748, Fax: (301) 731-4621

E-mail/Other: E-mail: napa@hotmix.org, Web Site: <http://www.hotmix.org>

Cost/terms: NAPA members \$9, nonmembers \$18; discounts for government agencies and educational institutions, and for quantity

Description: This video describes practical PCC preparation

methodologies. It elaborates the findings of a nationwide survey and field test of PCC rehabilitation using HMA overlays (PV-001).

Target audience: Pavement designers

Resealing Concrete Pavement Joints

Product: Slides with script

Date produced: 1991

Source: American Concrete Pavement Association (ACPA)

Contact: Lon D. Hawbaker, Director-Local Roads and Parking Areas, ACPA, 5420 Old Orchard Rd., Suite A100, Skokie, IL 60077-1059

Telephone/Fax: Tel: (847) 966-2272, Fax: (847) 966-9970, Orders: (800) 868-6733

E-mail/Other: E-mail:

lhawbaker@pavement.com, Web Site: <http://www.pavement.com>

Cost/terms: \$60

Description: These slides can be used to discuss resealing methods needed in order to lengthen concrete pavement life by limiting water and incompressible materials infiltration into the jointing system (Code No. SS512P). A companion publication, "Joint and Crack Sealing and Repair of Concrete

Pavements," is available as a study reference (Code No. TB012P).

Target audience: Engineers

Scale-Resistant Concrete Pavements

Product: Manual

Date produced: 1992

Source: Portland Concrete Association/
American Concrete Pavement Association

Contact: Lon D. Hawbaker, Director-Local
Roads and Parking Areas, ACPA, 5420 Old
Orchard Rd., Suite A100, Skokie, IL 60077-
1059

Telephone/Fax: Tel: (847) 966-2272, Fax:
(847) 966-9970, Orders: (800) 868-6733

E-mail/Other: E-mail:

lhawbaker@pavement.com, Web Site: <http://www.pavement.com>

Cost/terms: \$1, discounts available

Description: This manual describes the practices required to design and construct concrete pavements that have excellent resistance to surface scaling due to freezing and thawing and the use of deicing chemicals (Code No. IS117P).

Target audience: Construction and maintenance engineers

Selective Pavement Rehabilitation

Product: Videocassette (34 min.)

Date produced: 1994

Source: Video University Productions, Inc.

Contact: Video University Productions, Inc.,
3501 N. Happy Hollow Rd., Independence,
MO 64058

Telephone/Fax: Tel: (800) 927-8444

Cost/terms: \$49

Description: This video covers the benefits of "selective repair," which allows a contractor to rehabilitate a single lane of pavement without paving the entire road width and shoulders.

Target audience: Operations personnel, supervisors

A Simplified Method for the Design of Asphalt Overlays for Light-to-Medium Traffic Pavements

Product: Factsheet

Date produced: 1987

Source: Asphalt Institute

Contact: Ross Bentsen, Director of Education, Asphalt Institute, Research Park Drive, P.O. Box 14052, Lexington, KY 40512-4052
Telephone/Fax: Tel: (606) 288-4983

Cost/terms: \$3

Description: This publication gives guidelines for overlaying deteriorated road, street and highway pavements.

Target audience: Maintenance personnel

Slab Stabilization Guidelines for Concrete Pavements

Product: Manual

Date produced: 1994

Source: American Concrete Pavement Association (ACPA)

Contact: Lon D. Hawbaker, Director-Local
Roads and Parking Areas, ACPA, 5420 Old
Orchard Rd., Suite A100
Skokie, IL 60077-1059

Telephone/Fax: Tel: (847) 966-2272, Fax:
(847) 966-9970, Orders: (800) 868-6733

E-mail/Other: E-mail:

lhawbaker@pavement.com, Web Site: <http://www.pavement.com>

Cost/terms: \$7, discounts available

Description: This publication presents the guidelines necessary to specify and complete slab stabilization for concrete pavements. It discusses the methods, materials and equipment that are available for proper slab stabilization. Items discussed in detail include detecting voids, material selection, and construction practices (Code No. TB018P).

Target audience: Engineers, maintenance directors

Suggested Specifications for Construction of Concrete Streets

Product: Manual

Date produced: 1996

Source: American Concrete Pavement Association (ACPA)

Contact: Lon D. Hawbaker, Director-Local
Roads and Parking Areas, ACPA, 5420 Old
Orchard Rd., Suite A100, Skokie, IL 60077-
1059

Telephone/Fax: Tel: (847) 966-2272, Fax:

(847) 966-9970, Orders: (800) 868-6733
E-mail/Other: E-mail:
lhawbaker@pavement.com, Web Site: <http://www.pavement.com>
Cost/terms: \$4, discounts available
Description: The specifications cover general provisions, materials, concrete forming, slip forming, placing finishing, curing, jointing, measurement and payment, and opening traffic (Code No. IS119P).
Target audience: Engineers, consultants

Thickness Design-Asphalt Pavements for Heavy Wheel Loads

Product: Manual
Date produced: 1986
Source: Asphalt Institute
Contact: Ross Bentsen, Director of Education, Asphalt Institute, Research Park Drive, P.O. Box 14052, Lexington, KY 40512-4052
Telephone/Fax: Tel: (606) 288-4983
Cost/terms: \$14
Description: Presents a method for thickness design of asphalt pavements for heavy-duty vehicles such as log hauling trucks, dump body haulers, fork-lift trucks, straddle carriers, rubber-tired hoists and other vehicles having as few as four to as many as twelve or more tires. Contains 23 illustrations and 13 tables (MS-23). The heavy Wheel Load Thickness Design methods is available as a computer program (CP-2).
Target audience: Pavement engineers, designers

Thickness Design-Asphalt Pavements for Highways and Streets

Product: Manual
Date produced: 1991, ninth edition
Source: Asphalt Institute
Contact: Ross Bentsen, Director of Education, Asphalt Institute, Research Park Drive, P.O. Box 14052, Lexington, KY 40512-4052
Telephone/Fax: Tel: (606) 288-4983
Cost/terms: \$15
Description: This ninth edition presents a multi-layered elastic design approach to pavement thickness design, rather than empirical. Three temperature conditions are included in the 36 design charts covering

both SI (metric) and U.S. customary methods of measurement (MS-1). A computerized version of the Thickness Design Method is available (CP-4).

Target audience: Pavement engineers, designers

Thickness Design for Concrete Highway and Street Pavements

Product: Manual
Date produced: 1984
Source: Portland Concrete Association/
American Concrete Pavement Association
Contact: Lon D. Hawbaker, Director-Local Roads and Parking Areas, ACPA, 5420 Old Orchard Rd., Suite A100, Skokie, IL 60077-1059
Telephone/Fax: Tel: (847) 966-2272, Fax: (847) 966-9970, Orders: (800) 868-6733
E-mail/Other: E-mail:
lhawbaker@pavement.com, Web Site: <http://www.pavement.com>
Cost/terms: \$9, discounts available
Description: This manual discusses the determination of adequate pavement thickness to carry traffic loads. It explains a procedure that includes fatigue and erosion control design criteria for plain, reinforced and continually reinforced concrete pavements. It also evaluates the effects of concrete shoulders and lean concrete bases (Code No. EB109P).
Target audience: Pavement engineers

Ultra-Thin Whitetopping

Product: Videocassette (8 min.)
Date produced: 1995
Source: American Concrete Pavement Association (ACPA)
Contact: Lon D. Hawbaker, Director-Local Roads and Parking Areas, ACPA, 5420 Old Orchard Rd., Suite A100, Skokie, IL 60077-1059
Telephone/Fax: Tel: (847) 966-2272, Fax: (847) 966-9970, Orders: (800) 868-6733
E-mail/Other: E-mail:
lhawbaker@pavement.com, Web Site: <http://www.pavement.com>
Cost/terms: \$24.95
Description: This videocassette covers the

application of ultra-thin whitetopping on municipal and local roads on rutted asphalt pavements and intersections. A companion brochure complements the video and provides additional technical information. It was published jointly with the national Ready Mixed Concrete Association (Code No. VC414P).

Target audience: Public works directors, engineers, street superintendents

Ultra-Thin Whitetopping

Product: Slides with script

Date produced: 1996

Source: American Concrete Pavement Association (ACPA)

Contact: Lon D. Hawbaker, Director-Local Roads and Parking Areas, ACPA, 5420 Old Orchard Rd., Suite A100, Skokie, IL 60077-1059

Telephone/Fax: Tel: (847) 966-2272, Fax: (847) 966-9970, Orders: (800) 868-6733

E-mail/Other: E-mail:

lhawbaker@pavement.com, Web Site: <http://www.pavement.com>

Cost/terms: \$80

Description: This slide set explains the development, applications, construction procedures, benefits, advantages, and what's been learned about Ultra-Thin Whitetopping. The set complements SP126P and shows some of the applications around the country. Notes included for presentation in easy to use format (Code No. SS514P). A companion publication, "Ultra-Thin Whitetopping: Today's Choice for Durable Pavement Overlays," is available as a study reference (Code No. PL948P).

Target audience: Engineers, street superintendents, elected officials

Ultra-Thin Whitetopping CD-ROM Library

Product: CD-ROM

Date produced: 1996

Source: American Concrete Pavement Association

Contact: Lon D. Hawbaker, Director-Local Roads and Parking Areas, ACPA, 5420 Old Orchard Rd., Suite A100, Skokie, IL 60077-1059

Telephone/Fax: Tel: (847) 966-2272, Fax: (847) 966-9970, Orders: (800) 868-6733

E-mail/Other: E-mail:

lhawbaker@pavement.com, Web Site: <http://www.pavement.com>

Cost/terms: \$20

Description: A first for the use of slides on CD-ROM format. This UTW library has the 41 slides from SS514P in an on-screen presentation mode. In addition, the individual slides are available in .tif files for reproduction of either slides or photographs from the CD (Code No. CD002P).

Target audience: Engineers, street superintendents, elected officials

Ultra-Thin Whitetopping: Today's Choice for Durable Pavement Overlays

Product: Manual

Date produced: 1995

Source: American Concrete Pavement Association (ACPA)

Contact: Lon D. Hawbaker, Director-Local Roads and Parking Areas, ACPA, 5420 Old Orchard Rd., Suite A100, Skokie, IL 60077-1059

Telephone/Fax: Tel: (847) 966-2272, Fax: (847) 966-9970, Orders: (800) 868-6733

E-mail/Other: E-mail:

lhawbaker@pavement.com, Web Site: <http://www.pavement.com>

Cost/terms: \$2.40, discounts available

Description: This manual describes ultra-thin whitetopping use for municipal and local roads on rutted asphalt pavements and intersections. It includes promotional and technical information in an easy to understand format (PL948P).

Target audience: Engineers, public works officials, city and county commissioners

Utility Cuts and Full-Depth Repairs in Concrete Streets

Product: Manual

Date produced: 1989

Source: American Concrete Pavement Association (ACPA)

Contact: Lon D. Hawbaker, Director-Local Roads and Parking Areas, ACPA, 5420 Old Orchard Rd.,

Suite A100, Skokie, IL 60077-1059
Telephone/Fax: Tel: (847) 966-2272, Fax:
(847) 966-9970, Orders: (800) 868-6733
E-mail/Other: E-mail:
lhawbaker@pavement.com, Web Site: [http://
www.pavement.com](http://www.pavement.com)
Cost/terms: \$2.40, discounts available
Description: This manual describes recommended practices for the restoration of trenches cut into concrete pavements, including removing concrete, excavating, backfilling (including flowable fill), designing concrete mix, and placing (Code No. IS235P). Companion piece in non-technical format available (Code No. PA169P).
Target audience: City street officials, maintenance personnel

Whitetopping

Product: Slides with script
Date produced: 1991
Source: American Concrete Pavement Association (ACPA)
Contact: Lon D. Hawbaker, Director-Local Roads and Parking Areas, ACPA, 5420 Old Orchard Rd., Suite A100, Skokie, IL 60077-1059
Telephone/Fax: Tel: (847) 966-2272, Fax:
(847) 966-9970, Orders: (800) 868-6733
E-mail/Other: E-mail:
lhawbaker@pavement.com, Web Site: [http://
www.pavement.com](http://www.pavement.com)
Cost/terms: \$90
Description: These slides present a "how to" for this technique. Concrete overlays of asphalt pavements are described with charts, diagrams and photographs from recent projects (Code No. SS509P). A companion publication, "Guidelines for Concrete Overlays of Existing Asphalt Pavements," is available as a study reference (Code No. (TB009P)).
Target audience: Engineers

Safety



Adopt-a-Road: Program and Roadside Safety Training

Product: Slide-tape

Date produced: 1990

Source: Louisiana T² Program

Contact: Louisiana Transportation Research Center, 4101 Gourrier Ave., Baton Rouge, LA 70808

Telephone/Fax: Tel: (504) 767-9117, Fax: (504) 767-9156

E-mail/Other: E-mail: laltap@ltrc.lsu.edu

Cost/terms: Free six week loan for public agencies/may duplicate; \$25 for private/may not duplicate

Description: This slide-tape demonstration discusses the Adopt-a-Road program, the responsibilities of the group adopting the road, the responsibilities of the Louisiana Department of Transportation and Development, and safety and hazard precautions necessary when working along the roadside (G1018A).

Target audience: Adopt-a-Road participants

Back Safety/Construction Fall Protection

Product: Course Materials

2 Videocassettes (10 min. each)

Date produced: 1991

Source: Video Information System Training Associates, Inc. (VISTA)

Contact: Ray Peterson, Director of Program Development, VISTA, 525 Milwaukee Ave., P.O. Box 247, Burlington, WI 53105

Telephone/Fax: Tel: (800) 942-2886

Cost/terms: \$390 a set

Description: Back Safety provides information on how the back works; lifting safely and properly; special back dangers; how you are affected by posture; the effects of proper exercise on your back; and why total physical

fitness is important. Construction Fall Protection alerts employees to the serious consequences of falls and explains how most falls can be prevented. This materials includes a facilitator's manual and ten tests.
Target audience: All employees

Bergwall 1996 Safety & Technical Skills Training Catalog

Product: Publication

Date produced: 1996

Source: Bergwall Productions

Contact: Bergwall, 540 Baltimore Pike, P.O. Box 2400, Chadds Ford, PA 19317

Telephone/Fax: Tel: (800) 645-3565, Fax: (610) 388-0405

E-mail/Other: Web Site: <http://www.bergwall.com/bergwall>

Cost/terms: Free

Description: Contains audio-visual training products in the areas of safety, welding, electronics, drafting and communications.

Target audience: Supervisors

Confined Space Atmospheric Testing

Product: Course Materials

Videocassette (17 min.)

Date produced: 1991

Source: Video Information System Training Associates, Inc. (VISTA)

Contact: Ray Peterson, Director of Program Development, VISTA, 525 Milwaukee Ave., P.O. Box 247, Burlington, WI 53105

Telephone/Fax: Tel: (800) 942-2886

Cost/terms: \$495, seven-day rental \$125. Includes facilitator's manual, 10 participant manuals and post-tests. Additional sets of participant manuals and post-tests are available at \$2 a set.

Description: This program discusses the atmospheric hazards found in confined

spaces frequently encountered in utility-type construction and excavation work. The program covers the dangers involved in this work, the procedure for proper pre-testing, and how to respond when the air is found to be unsafe.

Target audience: All workers and supervisors required to enter confined spaces

Confined Space Hotwork

Product: Course Materials

Videocassette (20 min.)

Date produced: 1992

Source: Video Information System Training Associates, Inc. (VISTA)

Contact: Ray Peterson, Director of Program Development, VISTA, 525 Milwaukee Ave., P.O. Box 247, Burlington, WI 53105
Telephone/Fax: Tel: (800) 942-2886

Cost/terms: \$495, seven-day rental \$125. Includes facilitator's manual, 10 participant manuals and post-tests. Additional sets of participant manuals and post-tests are available at \$2 a set.

Description: Welding in a confined space requires special planning. This program provides information about what to consider before you begin any type of hotwork in a confined space, including a manhole, a drain or storm sewer pipe, an above-ground building with limited access, a trench and inside a trench box. Whenever air movement is limited and workers must use heat, such as a propane torch, special attention must be paid to the way the atmosphere around the worker changes. This program discusses what is necessary for health and safety. It includes information on special safety equipment, fire watches and emergency rescue procedures.

Target audience: Any person required to weld in a confined space

Confined Space Ventilation

Product: Course Materials

Videocassette

Date produced: 1992

Source: Video Information System Training Associates, Inc. (VISTA)

Contact: Ray Peterson, Director of Program

Development, VISTA, 525 Milwaukee Ave., P.O. Box 247, Burlington, WI 53105

Telephone/Fax: Tel: (800) 942-2886

Cost/terms: \$495, seven-day rental \$125. Includes facilitator's manual, 10 participant manuals and post-tests. Additional sets of participant manuals and post-tests are available at \$2 a set.

Description: This program provides vital information about ventilating a confined space when the atmosphere has tested out as hazardous. The program clearly demonstrates how easy it is to make a mistake in making assumptions about proper ventilation. Proper ventilation techniques and different ventilation methods are discussed. The program also discusses safety precautions involved in setting up and operating a ventilating procedure.

Target audience: All workers and supervisors required to enter confined spaces

Construction Zone Safety Inspector Course

Product: Course

Source: American Traffic Safety Services Association (ATSSA)

Contact: ATSSA, 5440 Jefferson Davis Highway, Fredericksburg, VA 22407-2673

Telephone/Fax: Tel: (800) 898-5400, (540) 898-5400, Fax: (540) 898-5510

E-mail/Other: E-mail: general@atssa.com,

Web Site: <http://www.atssa.com>

Cost/terms: Call for pricing information

Description: ATSSA has received permission from FHWA to present this National Highway Institute course, which is designed for anyone involved in the management of construction zone safety devices. Major topics discussed are inspection of traffic control plan operation; maintenance of signs, devices and markings; inspection of construction safety hardware; and resolution of discrepancies from contract requirements.

Target audience: Those involved in management of traffic control plans and inspection of construction zone safety devices

First Aid on the Job

Product: Course Materials

Videocassette

Date produced: 1991

Source: Video Information System Training Associates, Inc. (VISTA)

Contact: Ray Peterson, Director of Program Development, VISTA, 525 Milwaukee Ave., P.O. Box 247, Burlington, WI 53105
Telephone/Fax: Tel: (800) 942-2886

Cost/terms: \$395, seven-day rental \$125. Includes facilitator's manual, 10 participant manuals and post-tests. Additional sets of participant manuals and post-tests are available at \$2 a set.

Description: This program provides useful information on how to react when someone is injured. The program does not attempt to make a professional medical technician of the participant. It does give basic tips on what to do and not to do when an emergency occurs. Situations covered include what to do if a person is unconscious; when and how to move a victim; checking airways, breathing and circulation; stopping bleeding; symptoms of shock and prevention; and current information on avoiding blood borne diseases when assisting an injured person.

Target audience: All employees

Government Institutes' Environmental and Occupational Health & Safety Catalog

Product: Publication

Date produced: 1996

Source: Government Institutes

Contact: Government Institutes, 4 Research Pl., Rockville, MD 20850

Telephone/Fax: Tel: (301) 921-2355, Fax: (301) 921-0373

E-mail/Other: E-mail: giinfo@aol.com

Cost/terms: Free

Description: Contains handbooks, videos, CD-ROMS and course listings for government regulations in the areas of environmental laws, environmental engineering, pollution prevention, wetlands, OSHA compliance and safety management.

Target audience: Supervisors

Hand Safety

Product: Course Materials

Videocassette

Date produced: 1992

Source: Video Information System Training Associates, Inc. (VISTA)

Contact: Ray Peterson, Director of Program Development, VISTA, 525 Milwaukee Ave., P.O. Box 247, Burlington, WI 53105
Telephone/Fax: Tel: (800) 942-2886

Cost/terms: \$395, seven-day rental \$125. Includes facilitator's manual, 10 participant manuals and post-tests. Additional sets of participant manuals and post-tests are available at \$2 a set.

Description: This program uses live-action video and interviews with actual victims to point out the dangers of using equipment without complete caution. It highlights the most common dangerous areas on machinery. It explains how to use hand tools and outlines first-aid tips to use when a hand injury occurs. The program focuses on causes of hand injuries, how to identify dangerous situations, the proper use of hand tools and when to wear gloves for protection.

Target audience: All employees who may use hand tools

Hazard Communication

Product: Course Materials

Videocassette (19 min.)

Date produced: 1991

Source: Video Information System Training Associates, Inc. (VISTA)

Contact: Ray Peterson, Director of Program Development, VISTA, 525 Milwaukee Ave., P.O. Box 247, Burlington, WI 53105
Telephone/Fax: Tel: (800) 942-2886

Cost/terms: \$395, seven-day rental \$125

Description: This is an introduction or refresher for anyone who encounters hazardous chemicals. The program complies with OSHA 1910.1200 in identifying hazardous chemicals, reading warning labels and understanding MSDS.

Target audience: All employees who encounter hazardous chemicals

Hazards to Motor Vehicles and Pedestrians at Urban Construction Projects

Product: Videocassette (8 min.)

Date produced: 1991

Source: Department of Civil Engineering, West Virginia University

Contact: Ronald W. Eck, Professor of Civil Engineering, West Virginia University, P.O. Box 6103, Morgantown, WV 26506-6103
Telephone/Fax: Tel: (304) 293-3031 ext. 627, Fax: (304) 293-7109

E-mail/Other: E-mail: blanken@cemr.wvu.edu

Cost/terms: Free loan; may duplicate

Description: This videotape uses footage from actual construction projects to increase the viewer's sensitivity to public safety problems at urban construction sites. Appropriate countermeasures are also identified and illustrated. The non-technical presentation is suitable for both field and office personnel.

Target audience: Project engineers, city officials, construction supervisors and foremen

HAZCOM Videos

Product: Two videocassettes (17 min., 16 min.) and guidebooks

Date produced: 1992

Source: National Asphalt Pavement Association (NAPA)

Contact: NAPA, 5100 Forbes Blvd., Lanham, MD 20706

Telephone/Fax: Tel: (301) 731-4748, Fax: (301) 731-4621

E-mail/Other: E-mail: napa@hotmail.org, Web Site: <http://www.hotmix.org>

Cost/terms: NAPA members \$195, nonmembers \$425

Description: The first video, "What's Wrong with this Picture?" describes what is required by OSHA for the safe handling of industrial chemicals found at a typical hot-mix asphalt facility. The video shows how to fill out Material Safety Data Sheets using demonstrations. The second video, "A Guide to Compliance — Supervisor Training," illustrates how to keep a "Right-to-Know" program in compliance with the latest OSHA regulations (HS-10).

Target audience: Hot-mix asphalt facility owner/operators and employees

Identification and Treatment of High Hazard Locations

Product: Course

Date produced: 1992

Source: Northwestern University Traffic Institute

Contact: Robert K. Seyfried, Director, Transportation Engineering, Northwestern University Traffic Institute, 405 Church St., Evanston, IL 60204

Telephone/Fax: Tel: (800) 323-4011, (847) 491-5040, Fax: (847) 491-5270

E-mail/Other: Web Site: <http://www.nwu.edu/traffic>

Cost/terms: Cost available on request

Description: This workshop emphasizes practical solutions to problems in the identification of high hazard locations, development and selection of countermeasures, prioritization of candidate projects and evaluation of implemented projects. This comprehensive course is a synthesis of the approaches, practices and programs of many state, county and city agencies. Case studies and problem sessions illustrate practical applications of the course content.

Target audience: Technical personnel responsible for safety programs

Job Site Safety Training for Your Employees

Product: Manual

Date produced: Revised 1994

Source: Cornell Local Roads Program (CLRP)

Contact: Amy Dreher, Resource and Information Specialist, CLRP, 416 Riley-Robb Hall, Ithaca, NY 14853-5701

Telephone/Fax: Tel: (607) 255-8033, Fax: (607) 255-4080

E-mail/Other: E-mail: clrp@cornell.edu

Cost/terms: Free to New York State highway and public works officials; \$5 to others

Description: This course on safety issues targets highway superintendents, safety officers within highway departments, and others who regularly provide safety training to highway workers. Among the topics are

general safety considerations, getting started with a safety program, work zone safety, preparing a traffic control plan and flagging.
Target audience: Highway officials, public works personnel

Personal Protective Equipment

Product: Course Materials
Videocassette

Date produced: 1993

Source: Video Information System Training Associates, Inc. (VISTA)

Contact: Ray Peterson, Director of Program Development, VISTA, 525 Milwaukee Ave., P.O. Box 247, Burlington, WI 53105
Telephone/Fax: Tel: (800) 942-2886

Cost/terms: \$395, seven-day rental \$125. Includes facilitator's manual, 10 participant manuals and post-tests. Additional sets of participant manuals and post-tests are available at \$2 a set.

Description: This program assists in complying with OSHA/MSHA's proposed standards covering eye, face, head hand, ear and foot protection. The course discusses types of personal protective equipment, when to use them, how to ensure proper fit, and how and where to store protective equipment to keep it in good condition and readiness. The program emphasizes personal responsibility in protecting employee health through the use and care of personal protective equipment.

Target audience: Shop and field employees exposed to a wide variety of work hazards

Right-of-Way Mowing Safety

Product: Videocassette (23 min.)

Date produced: 1996

Source: Video Information System Training Associates, Inc. (VISTA)

Contact: Ray Peterson, Director of Program Development, VISTA, 525 Milwaukee Ave., P.O. Box 247, Burlington, WI 53105
Telephone/Fax: Tel: (800) 942-2886

Cost/terms: \$49.95

Description: This video, developed in partnership with John Deere, is filled with practical advice on ways to avoid accidents for mower operators, bystanders and the driving

public. Includes easy to follow pre-start inspection and maintenance advice.

Target audience: Mower operators, supervisors

Safety for Adopt-a-Highway Volunteers

Product: Videocassette (9 min.)

Date produced: 1990

Source: Pennsylvania Department of Transportation

Contact: Pennsylvania Department of Transportation Employees Library, Forum Place, 555 Walnut St., 8th Floor, Harrisburg, PA 17101-1900

Telephone/Fax: Tel: (717) 787-6527, Fax: (717) 772-8282

Cost/terms: \$35

Description: This videocassette presents a safety briefing for adopt-a-highway program volunteers (AV#01141).

Target audience: Highway litter program volunteers

Safety Orientation

Product: Course Materials
Videocassette (18 min.)

Date produced: 1993

Source: Video Information System Training Associates, Inc. (VISTA)

Contact: Ray Peterson, Director of Program Development, VISTA, 525 Milwaukee Ave., P.O. Box 247, Burlington, WI 53105
Telephone/Fax: Tel: (800) 942-2886

Cost/terms: \$395, seven-day rental \$125

Description: This program is designed for new employee orientation or as a general safety refresher. It emphasizes the importance of paying attention to details and staying alert to the possibility of safety hazards as well as how to respond in an emergency.

Target audience: New employees

Safety Training for Repair Technicians

Product: Videocassette (21 min.)

Date produced: 1996

Source: Video Information System Training Associates, Inc. (VISTA)

Contact: Ray Peterson, Director of Program Development, VISTA, 525 Milwaukee Ave., P.O. Box 247, Burlington, WI 53105
Telephone/Fax: Tel: (800) 942-2886

Cost/terms: \$49.95

Description: Developed in partnership with John Deere, Hertz and the Construction Industry Manufacturers Association, this video examines all types of repair related accidents and shows effective ways to prevent them.

Target audience: Mechanics, supervisors

Slips, Trips and Falls

Product: Course Materials

Videocassette (17 min.)

Date produced: 1993

Source: Video Information System Training Associates, Inc. (VISTA)

Contact: Ray Peterson, Director of Program Development, VISTA, 525 Milwaukee Ave., P.O. Box 247, Burlington, WI 53105
Telephone/Fax: Tel: (800) 942-2886

Cost/terms: \$395, seven-day rental \$125

Description: This program alerts employees to the serious consequences of falls and explains how almost all falls can be prevented.

Target audience: All employees

A Striper's Survival Guide

Product: Videocassette (12 min.)

Date produced: 1992

Source: American Traffic Safety Services Association (ATSSA)

Contact: ATSSA, 5440 Jefferson Davis Highway, Fredericksburg, VA 22407-2673

Telephone/Fax: Tel: (800) 898-5400, (540)

898-5400, Fax: (540) 898-5510

E-mail/Other: E-mail: general@atssa.com,

Web Site: <http://www.atssa.com>

Cost/terms: ATSSA members and public agencies \$25, non-members \$50

Description: This video focuses on crew safety during pavement striping operations. It describes some of the hazards associated with pavement marking materials and equipment, and discusses how workers can protect themselves through the use of protective clothing, good housekeeping and proper traffic control.

Target audience: Public and private pavement striping personnel

Trench Emergency

Product: Course Materials

Videocassette (16 min.)

Date produced: 1992

Source: Video Information System Training Associates, Inc. (VISTA)

Contact: Ray Peterson, Director of Program Development, VISTA, 525 Milwaukee Ave., P.O. Box 247, Burlington, WI 53105
Telephone/Fax: Tel: (800) 942-2886

Cost/terms: \$450, seven-day rental \$125.

Includes facilitator's manual, 10 participant manuals and post-tests are available at \$2 a set.

Description: This program details the procedures to be taken in response to a trench cave-in. Rescuers can become victims during a cave-in emergency. This course describes the correct conduct and methods to employ in such an emergency.

Target audience: All persons working around or in excavations

Trench Shoring/Confined Space Entry

Product: Course Materials

Videocassette (20 min.)

Date produced: 1992

Source: Video Information System Training Associates, Inc. (VISTA)

Contact: Ray Peterson, Director of Program Development, VISTA, 525 Milwaukee Ave., P.O. Box 247, Burlington, WI 53105
Telephone/Fax: Tel: (800) 942-2886

Cost/terms: \$390 for a set of two. Seven-day rental \$125. Includes facilitator's manual, 10 participant manuals and post-tests. Additional sets of participant manuals and post-tests are available at \$2 a set.

Description: This program gives employees a look at what must be considered when working in a trench. Conditions may change rapidly during any excavation job; this program provides information about some of the danger signs that could indicate a trench collapse. This program is designed to enhance awareness about the dangers faced in a confined space work situation. The Confined Space Entry program discusses when

an entry permit is required; what's involved with atmospheric testing; what type of personal protective equipment is required in a confined space; and the training required for an entry team.

Target audience: Employees and supervisors involved in excavation work

Trenching and Shoring

Product: Course Materials

Videocassette

Date produced: 1992

Source: Video Information System Training Associates, Inc. (VISTA)

Contact: Ray Peterson, Director of Program Development, VISTA, 525 Milwaukee Ave., P.O. Box 247, Burlington, WI 53105
Telephone/Fax: Tel: (800) 942-2886

Cost/terms: \$450, seven-day rental \$125. Includes facilitator's manual, 10 participant manuals and post-tests. Additional sets of participant manuals and post-tests are available at \$2 a set.

Description: This program is designed to make every person who works in a trench of any type aware of the importance of using proper protection during all excavation work. The program briefly describes how to evaluate an excavation site, the most effective worker protection systems, the accepted general safety practices and how to respond in an emergency.

Target audience: All persons involved in excavation work

Without Due Process

Product: Videocassette (7 min.)

Date produced: 1986

Source: Pennsylvania Department of Transportation

Contact: Pennsylvania Department of Transportation Employees Library, Forum Place, 555 Walnut St., 8th Floor, Harrisburg, PA 17101-1900

Telephone/Fax: Tel: (717) 787-6527, Fax: (717) 772-8282

Cost/terms: \$35

Description: This videotape shows the hazards of overhead wiring to highway equipment (AV#00393).

Target audience: Equipment operators and supervisors

Your Summer Job/Your Summer Safety

Product: Videocassette (6 min.)

Date produced: 1990

Source: Pennsylvania Department of Transportation

Contact: Pennsylvania Department of Transportation Employees Library, Forum Place, 555 Walnut St., 8th Floor, Harrisburg, PA 17101-1900

Telephone/Fax: Tel: (717) 787-6527, Fax: (717) 772-8282

Cost/terms: \$35

Description: This videotape provides an introduction to highway safety for summer employees (AV#01140).

Target audience: Supervisors and summer employees

Signs and Signals



Advance Warning Arrow Panels: Positive Guidance

Product: Videocassette (25 min.)

Date produced: 1992

Source: American Traffic Safety Services Association (ATSSA)

Contact: ATSSA, 5440 Jefferson Davis Highway, Fredericksburg, VA 22407-2673

Telephone/Fax: Tel: (800) 898-5400, (540)

898-5400, Fax: (540) 898-5510

E-mail/Other: E-mail: general@atssa.com,

Web Site: <http://www.atssa.com>

Cost/terms: ATSSA members and public agencies \$25, non-members \$50

Description: Produced by FHWA, this video covers the basic design and use of flashing arrow panels with strong emphasis on correct application and placement. Information on specifications, power supplies, cost and maintenance procedures is also featured.

Target audience: Transportation and traffic engineers

Basic Sign Installation

Product: Course

Date produced: 1992 (updated 1994)

Source: Transportation Training Division, Texas Engineering Extension Service (TTD TEEX)

Contact: Nelson Evans, Head, TTD TEEX, The Texas A & M University System, College Station, TX 77843-8000

Telephone/Fax: Tel: (409) 845-4457, Fax: (409) 862-4768

E-mail/Other: E-mail: trevans@teexnet.tamu.edu

Cost/terms: Available on request

Description: This course was developed to

reduce the risk of signing and traffic signal maintenance liability. It provides training in the accepted principles and standards of sign installation and maintenance.

Target audience: Technical personnel in traffic operations

Guidelines for the Use of Portable Changeable Message Signs

Product: Manual

Date produced: 1993

Source: American Traffic Safety Services Association (ATSSA)

Contact: ATSSA, 5440 Jefferson Davis Highway, Fredericksburg, VA 22407-2673

Telephone/Fax: Tel: (800) 898-5400, (540)

898-5400, Fax: (540) 898-5510

E-mail/Other: E-mail: general@atssa.com,

Web Site: <http://www.atssa.com>

Cost/terms: Free, \$1 for more than five copies

Description: These guidelines are intended to provide the practitioner with general information on the application, placement, and operation of portable changeable message signs.

They are not intended to provide specific equipment specifications nor should they be considered a substitute for the provisions of Section 6F-2 of the MUTCD, the latest version of which is included in appendix A.

Target audience: Highway agency personnel, contractors

Maintenance of Signs and Pavement Markings

Product: Course (16 hours)

Date produced: 1989 (updated 1992)

Source: Transportation Training Division, Texas Engineering Extension Service (TTD TEEX)

Contact: Nelson Evans, Head, TTD TEEX, The Texas A & M University System, College Station, TX 77843-8000

Telephone/Fax: Tel: (409) 845-4457, Fax: (409) 862-4768

E-mail/Other: E-mail: trevans@teexnet.tamu.edu

Cost/terms: Available on request

Description: This course is designed to cover the preventive maintenance of signs and pavement markings as well as record keeping and inventory of traffic control devices. It is intended for personnel with limited maintenance and supervisory experience.

Target audience: State and local maintenance personnel

Microcomputer Applications in Signal Timing

Product: Course

Date produced: 1995

Source: Northwestern University Traffic Institute

Contact: Robert K. Seyfried, Director, Transportation Engineering, Northwestern University Traffic Institute, 405 Church St., Evanston, IL 60204

Telephone/Fax: Tel: (800) 323-4011, (847) 491-5040, Fax: (847) 491-5270

E-mail/Other: Web Site: <http://www.nwu.edu/traffic>

Cost/terms: Cost available on request

Description: This workshop provides practical experience in the use of microcomputer programs for developing and evaluating traffic signal timing in order to select the signal operations most beneficial to the network as a whole. Extensive microcomputer hands-on exercises are included.

Target audience: Traffic operations engineers

New Directions in Sign Management

Product: Videocassette (15 min.)

Date produced: 1988

Source: American Traffic Safety Services Association (ATSSA)

Contact: ATSSA, 5440 Jefferson Davis Highway, Fredericksburg, VA 22407-2673

Telephone/Fax: Tel: (800) 898-5400, (540) 898-5400, Fax: (540) 898-5510

E-mail/Other: E-mail: general@atssa.com, Web Site: <http://www.atssa.com>

Cost/terms: ATSSA members and public agencies \$25, non-members \$50

Description: This video describes how local jurisdictions can develop an effective sign maintenance program, including inventory, evaluation and scheduled replacement.

Target audience: City, county and other local jurisdictions

Pavement Marking Inspection Course

Product: Course

Source: American Traffic Safety Services Association (ATSSA)

Contact: ATSSA, 5440 Jefferson Davis Highway, Fredericksburg, VA 22407-2673

Telephone/Fax: Tel: (800) 898-5400, (540) 898-5400, Fax: (540) 898-5510

E-mail/Other: E-mail: general@atssa.com, Web Site: <http://www.atssa.com>

Cost/terms: Call for pricing information

Description: An abbreviated version of ATSSA's Pavement Marking Technician course, this course is designed to meet the specific needs of agency inspectors. This one-day course is modular, allowing agencies the flexibility of selecting specific areas of concentration. Topics include importance of pavement markings; standards and design; layout and premarking; personal safety; materials and installation; quality control; documentation; and ethics and professionalism.

Target audience: Public agency highway inspectors

Pavement Marking Technician Training Course

Product: Course

Date produced: 1994

Source: American Traffic Safety Services Association (ATSSA)

Contact: ATSSA, 5440 Jefferson Davis Highway, Fredericksburg, VA 22407-2673

Telephone/Fax: Tel: (800) 898-5400, (540)

898-5400, Fax: (540) 898-5510
E-mail/Other: E-mail: general@atssa.com,
Web Site: <http://www.atssa.com>

Cost/terms: Contact ATSSA's Education Department

Description: This 20-hour training course and certification program covers marking standards, types of materials, HAZMAT regulations, personal safety, traffic control, installation procedures, documentation, design, layout, legal responsibilities, and ethics and professionalism. Following the completion of the course, participants may elect to take a written exam. Successful completion of the exam is one requirement for certification by ATSSA as a "Pavement Marking Technician." The course is offered at various locations nationwide throughout the year. Continuing Education Units are available for an additional fee paid in advance.

Target audience: Pavement marking technicians

Right Before Your Eyes

Product: Videocassette (10 min.)

Date produced: 1993

Source: American Traffic Safety Services Association (ATSSA)

Contact: ATSSA, 5440 Jefferson Davis Highway, Fredericksburg, VA 22407-2673

Telephone/Fax: Tel: (800) 898-5400, (540)

898-5400, Fax: (540) 898-5510

E-mail/Other: E-mail: general@atssa.com,

Web Site: <http://www.atssa.com>

Cost/terms: \$10

Description: This video describes how a good pavement marking maintenance program can help highway agencies provide higher levels of service and safety to their customers and the motoring public. It stresses the need for regularly-scheduled maintenance of markings and the use of more durable marking materials where appropriate.

Target audience: Elected officials, Metropolitan Planning Organizations, civic groups, highway agency personnel

Standard Highway Signs

Product: Manual

Date produced: 1979 edition updated with current revisions

Source: American Traffic Safety Services Association (ATSSA)

Contact: ATSSA, 5440 Jefferson Davis Highway, Fredericksburg, VA 22407-2673

Telephone/Fax: Tel: (800) 898-5400, (540)

898-5400, Fax: (540) 898-5510

E-mail/Other: E-mail: general@atssa.com,

Web Site: <http://www.atssa.com>

Cost/terms: ATSSA members and public agencies \$40, nonmembers \$50

Description: This publication contains detailed drawings of all the standard highway signs prescribed or provided for in the MUTCD. It has been prepared by the Federal Highway Administration for use by all traffic authorities, agencies, jurisdictions, private sign companies or others involved with the fabrication, installation and maintenance of traffic signs. The manual includes drawings showing exact dimensions and layout for all regulatory, warning and guide signs, as well as conversion tables and standard alphabet-numeral series. It comes in a heavy-duty, loose-leaf binder with current revisions.

Target audience: Traffic authorities, agencies, private sign companies

Traffic Control Devices Workshop

Product: Course

Date produced: 1994

Source: Northwestern University Traffic Institute

Contact: Robert K. Seyfried, Director, Transportation Engineering, Northwestern University Traffic Institute, 405 Church St., Evanston, IL 60204

Telephone/Fax: Tel: (800) 323-4011, (847)

491-5040, Fax: (847) 491-5270

E-mail/Other: Web site: <http://www.nwu.edu/traffic>

Cost/terms: Cost available on request

Description: This workshop provides guidance in interpreting and applying the principles of the Manual on Uniform Traffic Control Devices and concepts of positive guidance. Traffic signing and pavement

marking materials, inspection, and maintenance practices will be covered.

Target audience: Persons responsible for placing and maintaining signs and pavement markings

Traffic Signal Retiming for Intersections and/or Arterial Streets

Product: Course

Date produced: 1991

Source: Transportation Research Center, University of Florida

Contact: Charles E. Wallace, Director, Transportation Research Center, University of Florida, 512 Weil Hall, P.O. Box 116585, Gainesville, FL 32611-6585

Telephone/Fax: Tel: (352) 392-0378, Fax: (352) 392-3224

E-mail/Other: E-mail: t2@ce.ufl.edu

Cost/terms: Ask contact

Description: This is a flexible, three- to eight-day comprehensive course on traffic signal timing optimization. It includes timing of both isolated signals and arteries. Depending on the length, it may include basic material (comprehensive course) or just the computer model applications (three- to four-day). It covers the WHICH and AAP model integrators and all their component programs (HCS, SOAP, SIGNAL85, SIDRA, TRAF-NETSIM) and unsignalized for isolated signals. It also covers PASSER II and TRANSYT-7F for arteries. Material from the network TRANSYT-7F course can optionally be included.

Target audience: Traffic engineers, transportation planners

Traffic Signal Workshop

Product: Course

Date produced: 1995

Source: Northwestern University Traffic Institute

Contact: Robert K. Seyfried, Director, Transportation Engineering, Northwestern University Traffic Institute, 405 Church St., Evanston, IL 60204

Telephone/Fax: Tel: (800) 323-4011, (847)

491-5040, Fax: (847) 491-5270

E-mail/Other: Web site: <http://www.nwu.edu/traffic>

Cost/terms: Cost available on request

Description: This workshop provides a working knowledge of the latest theory and application of the functional capabilities of traffic signal controllers and systems. Emphasis is on the development and evaluation of signal timing and phasing plans and the selection of signal control equipment. The goal is optimum efficiency and safety of traffic flow at intersections, on street systems and in roadway networks.

Target audience: Engineers and technicians with responsibilities for traffic operations

Traffic Signal Workshop — Traffic Actuated Control

Product: Course

Date produced: 1994

Source: Northwestern University Traffic Institute

Contact: Robert K. Seyfried, Director, Transportation Engineering, Northwestern University Traffic Institute, 405 Church St., Evanston, IL 60204

Telephone/Fax: Tel: (800) 323-4011, (847) 491-5040, Fax: (847) 491-5270

E-mail/Other: Web site: <http://www.nwu.edu/traffic>

Cost/terms: Cost available on request

Description: This workshop concentrates on the planning, design, and operation of traffic-actuated signals. Emphasis is placed on the selection of traffic signal control and detection equipment and the optimization of intersection signal timing and detector placement.

Target audience: Engineers and technicians with responsibilities related to planning and operating intersection traffic-actuated signal control

Snow and Ice Control



Response to Winter

Product: Videocassette

Date produced: 1993

Source: Pennsylvania Department of Transportation

Contact: Pennsylvania Department of Transportation Employees Library, Forum Place, 555 Walnut St., 8th Floor, Harrisburg, PA 17101-1900

Telephone/Fax: Tel: (717) 787-6527, Fax: (717) 772-8282

Cost/terms: \$35

Description: The how and why of the Pennsylvania Department of Transportation's winter operations (AV#02020).

Target audience: Supervisors and work crews

Snow and Ice Control: A Review of Innovative Practices

Product: Videocassette (4 hrs.)

Date produced: 1995

Source: University of Minnesota Center for Transportation Studies

Contact: Bev Ringsak, CTS, 511 Washington Ave., SE, 200 Transportation and Safety Bldg., Minneapolis, MN 55455

Telephone/Fax: Tel: (612) 625-6689

E-mail/Other: E-mail:

bringsak@mail.cee.umn.edu

Cost/terms: \$195; \$95 for residents of states that participated in the satellite conference (Minnesota, Alaska, Missouri and Nevada); a free seven-minute demo tape is available

Description: This video of the 1995 satellite conference reviews some of the best and most innovative snow and ice control prac-

tices being used in Minnesota, the nation and the world. It shows how many local governments have moved from reactive processes to preventive practices, saving time and money, reducing complaints, improving performance and reducing liability. Includes manual.

Target audience: Local government officials

The Snowfighters

Product: Videocassette

Date produced: 1995

Source: Salt Institute

Contact: Andrew C. Briscoe III, Director of Public Policy, Salt Institute, 700 N. Fairfax St., Suite 600, Alexandria, VA 22314-2040

Telephone/Fax: Tel: (703) 549-4648, Fax: (703) 548-2194

E-mail/Other: Web site: <http://www.saltinstitute.org>

Cost/terms: \$20

Description: The Snowfighters is a new training video that contains updated information on the costs vs. benefits of salt as a highway deicer, maintenance and winter preparations, spreader calibrations and snowfighting techniques.

Target audience: Highway agencies and users of salt for deicing wintertime roadways

Traffic



Barrier Delineation in Work Zones: The Well-Defined Path

Product: Videocassette (24 min.)

Date produced: 1992

Source: American Traffic Safety Services Association (ATSSA)

Contact: ATSSA, 5440 Jefferson Davis Highway, Fredericksburg, VA 22407-2673

Telephone/Fax: Tel: (800) 898-5400, (540) 898-5400, Fax: (540) 898-5510

E-mail/Other: E-mail: general@atssa.com,
Web Site: <http://www.atssa.com>

Cost/terms: ATSSA members and public agencies \$25, non-members \$50

Description: Produced by FHWA, this video covers the pros and cons of various methods and devices used to delineate concrete safety-shaped barriers in work zones. Coverage includes delineation standards, devices, techniques, end treatments, maintenance and selection guidelines.

Target audience: Those who work in or near traffic control work areas

Flagger Training Course

Product: Course

Source: American Traffic Safety Services Association (ATSSA)

Contact: ATSSA, 5440 Jefferson Davis Highway, Fredericksburg, VA 22407-2673

Telephone/Fax: Tel: (800) 898-5400, (540) 898-5400, Fax: (540) 898-5510

E-mail/Other: E-mail: general@atssa.com,
Web Site: <http://www.atssa.com>

Cost/terms: Call for pricing information

Description: There are 250,000 flaggers in the U.S. who need training on standard flagging procedures. In order to ensure that they receive this training, ATSSA, AASHTO and FHWA have developed a national "train-the-trainer" flagger registration program.

This unique opportunity allows qualified individuals to become certified instructors who can then train flaggers at their convenience.

Flagging and the Flagger

Product: Videocassette (19 min.)

Date produced: 1987

Source: Pennsylvania Department of Transportation

Contact: Pennsylvania Department of Transportation Employees Library, Forum Place, 555 Walnut St., 8th Floor, Harrisburg, PA 17101-1900

Telephone/Fax: Tel: (717) 787-6527, Fax: (717) 772-8282

Cost/terms: \$35

Description: This videotape shows the importance of the flagging responsibility in various situations, such as two-lane, four-lane and intersections (AV#00672).

Target audience: Flaggers and supervisors

Flagging Handbook

Product: Handbook

Date produced: 1981, revised 1994

Source: American Traffic Safety Services Association (ATSSA)

Contact: ATSSA, 5440 Jefferson Davis Highway, Fredericksburg, VA 22407-2673

Telephone/Fax: Tel: (800) 898-5400, (540) 898-5400, Fax: (540) 898-5510

E-mail/Other: E-mail: general@atssa.com,
Web Site: <http://www.atssa.com>

Cost/terms: ATSSA members and public agencies \$2.50, non-members \$3.75, quantity discounts available

Description: Previously published by FHWA, this handbook has been updated and reprinted. The pocket-sized book is intended to assist the flagger in understanding his or

her duties and to be available for ready reference on the job. It has color illustrations on almost every page showing equipment, positioning of flaggers and devices, correct procedures, and rules of conduct, as well as a new section on emergency situations. In addition, there is special information to assist supervisors in selecting and training flaggers.

Target audience: Those who work in or near traffic control work areas

Flagging: Work Zone Traffic Control

Product: Videocassette (11 min.)

Date produced: 1986

Source: Pennsylvania Department of Transportation

Contact: Pennsylvania Department of Transportation Employees Library, Forum Place, 555 Walnut St., 8th Floor, Harrisburg, PA 17101-1900

Telephone/Fax: Tel: (717) 787-6527, Fax: (717) 772-8282

Cost/terms: \$35

Description: This videotape describes the how and why of flagging (AV#00420).

Target audience: Flaggers and road foremen

Highway Capacity

Product: Course (32 hours)

Date produced: 1987 (updated 1995)

Source: Transportation Training Division, Texas Engineering Extension Service (TTD TEEX)

Contact: Nelson Evans, Head, TTD TEEX, The Texas A & M University System, College Station, TX 77843-8000

Telephone/Fax: Tel: (409) 845-4457, Fax: (409) 862-4768

E-mail/Other: E-mail:

trevans@teexnet.tamu.edu

Cost/terms: Available on request

Description: This course explains the concepts of the new Highway Capacity Manual. It covers basic concepts, weaving areas, ramps, freeway systems, signalized and unsignalized arterials, and multi-lane highways. The course also includes a problem-solving workshop using microcomputer software.

Target audience: Engineers and experienced technicians

Highway Capacity Analysis Training Course

Product: Course

Date produced: 1994

Source: Transportation Research Center, University of Florida

Contact: William M. Sampson, McTrans Manager, University of Florida, 512 Weil Hall, P.O. Box 116585, Gainesville, FL 32611-6585
Telephone/Fax: Tel: (352) 392-0378, Fax: (352) 392-3224

E-mail/Other: E-mail: mctrans@ce.ufl.edu

Cost/terms: Ask contact

Description: This comprehensive course in capacity analysis for most chapters of the Highway Capacity Manual covers the theory and procedures for the analysis of capacity and determination of the level of service. The course also covers the application of the Highway Capacity Software, including data coding, modeling and interpreting results. A one-day presentation is also available.

Target audience: Traffic engineers, transportation planners

Highway Capacity Workshop

Product: Course

Date produced: 1995

Source: Northwestern University Traffic Institute

Contact: Robert K. Seyfried, Director, Transportation Engineering, Northwestern University Traffic Institute

405 Church St., Evanston, IL 60204

Telephone/Fax: Tel: (800) 323-4011, (847) 491-5040, Fax: (847) 491-5270

E-mail/Other: Web Site: <http://www.nwu.edu/traffic>

Cost/terms: Cost available on request

Description: This workshop presents all chapters of the Highway Capacity Manual. Instruction and practice in the capacity analysis techniques will be provided through lecture and extensive problem-solving sessions. This course includes discussions of up-to-date research results and interpretations of the principles and procedures of the Manual.

Target audience: Traffic, design, highway planning, or urban planning engineers or technicians

Highway Capacity Workshop - Arterial Streets and Intersections

Product: Course

Date produced: 1995

Source: Northwestern University Traffic Institute

Contact: Robert K. Seyfried, Director, Transportation Engineering, Northwestern University Traffic Institute

405 Church St., Evanston, IL 60204

Telephone/Fax: Tel: (800) 323-4011, (847)

491-5040, Fax: (847) 491-5270

E-mail/Other: Web Site: <http://www.nwu.edu/traffic>

Cost/terms: Cost available on request

Description: This workshop focuses on the materials and techniques of capacity analysis related to arterial street systems and intersections (signalized and unsignalized).

Principles and procedures of capacity analysis contained in the Highway Capacity Manual will be presented in this course.

Target audience: Traffic, design, highway planning, or urban planning engineers or technicians

Highway-Railroad Grade Crossing Workshop

Product: Course

Date produced: 1996

Source: Northwestern University Traffic Institute

Contact: Robert K. Seyfried, Director, Transportation Engineering, Northwestern University Traffic Institute

405 Church St., Evanston, IL 60204

Telephone/Fax: Tel: (800) 323-4011, (847)

491-5040, Fax: (847) 491-5270

E-mail/Other: Web Site: <http://www.nwu.edu/traffic>

Cost/terms: Cost available on request

Description: This workshop provides participants with the tools for diagnosing safety and operational problems at highway-railroad grade crossings, and for the analysis and evaluation of alternative improvements

and remedial actions.

Target audience: Personnel responsible for traffic operations, design and safety

Introduction to Traffic Practices

Product: Manual

Date produced: 1995

Source: Missouri Highway Transportation Department

Contact: Jim Radmacher, Technology Transfer Engineer, LTAP Director, Missouri Highway and Transportation Department

P.O. Box 270, Jefferson City, MO 65102

Telephone/Fax: Tel: (573) 751-0852, Fax:

(573) 526-4337

Cost/terms: Available upon request

Description: This guidebook for local agencies assists officials in identifying traffic problems and provides insight into typical traffic engineering questions.

Target audience: Small city, county and township officials

Life in the Closed Lane

Product: Videocassette (38 min.)

Slide-tape

Date produced: 1989

Source: American Traffic Safety Services Association (ATSSA)

Contact: ATSSA, 5440 Jefferson Davis Highway, Fredericksburg, VA 22407-2673

Telephone/Fax: Tel: (800) 898-5400, (540)

898-5400, Fax: (540) 898-5510

E-mail/Other: E-mail: general@atssa.com,

Web Site: <http://www.atssa.com>

Cost/terms: ATSSA members and public agencies \$25/video, \$75 slide-tape, non-members \$50/video, call for information on slide-tape

Description: This two-part safety training program trains workers who install, service and remove traffic control devices in work zones, with safety as the bottom line. It is available in both video and slide-tape formats.

Target audience: Those who work in or near traffic control area

Low-Cost Improvements for Two-Lane Highways

Product: Course

Date produced: 1993

Source: Northwestern University Traffic Institute

Contact: Robert K. Seyfried, Director, Transportation Engineering, Northwestern University Traffic Institute, 405 Church St. Evanston, IL 60204

Telephone/Fax: Tel: (800) 323-4011, (847) 491-5040, Fax: (847) 491-5270

E-mail/Other: Web Site: <http://www.nwu.edu/traffic>

Cost/terms: Cost available on request

Description: This workshop assists highway engineers in identifying potential traffic flow and safety deficiencies on existing two-lane highways and in making cost-effective decisions on the types of improvements that may be appropriate. Design projects are used to give participants the opportunity to apply the principles and techniques discussed in the course. All lecture and notebook materials and class design projects are presented in metric units.

Target audience: Traffic operations engineers

Manual on Uniform Traffic Control Devices (MUTCD) on CD-ROM

Product: CD-ROM

Date produced: 1996

Source: American Traffic Safety Services Association (ATSSA)

Contact: ATSSA, 5440 Jefferson Davis Highway, Fredericksburg, VA 22407-2673

Telephone/Fax: Tel: (800) 898-5400, (540) 898-5400, Fax: (540) 898-5510

E-mail/Other: E-mail: general@atssa.com, Web Site: <http://www.atssa.com>

Cost/terms: ATSSA members \$95, nonmembers \$145

Description: ATSSA is now exclusively offering the MUTCD on CD-ROM. More than just an electronic book, it is a time and money saving tool. Features include a powerful built-in search engine that allows keyword/phrase searches by section, topic group, or the entire manual. Instantly find

every reference to any topic; figures can be cut and pasted; electronic annotations can be electronically paper clipped to the manual; keyboard accelerator keys, a built-in help menu; topics linked by hot spots; and direct printing. Produced by Yellow Dog Publishing.
Target audience: Traffic engineers, technicians

The Manual on Uniform Traffic Control Devices Part VI - Standards and Guides for Traffic Controls for Street and Highway Construction, Maintenance, Utility and Incident Management Operations

Product: Manual

Date produced: 1995

Source: American Traffic Safety Services Association (ATSSA)

Contact: ATSSA, 5440 Jefferson Davis Highway, Fredericksburg, VA 22407-2673

Telephone/Fax: Tel: (800) 898-5400, (540) 898-5400, Fax: (540) 898-5510

E-mail/Other: E-mail: general@atssa.com, Web Site: <http://www.atssa.com>

Cost/terms: ATSSA members and public agencies \$10, non-members \$12

Description: ATSSA is now offering the only version of Part VI that includes Revision No. 4 and Errata No. 1. Due to special arrangements with FHWA and because ATSSA is the recognized leader in promoting traffic safety, we can offer this 6" x 9" version at considerable savings, even less than the federal government.

Target audience: Traffic engineers

Nighttime Traffic Control in Work Zones

Product: Videocassette (18 min.)

Date produced: 1986

Source: American Traffic Safety Services Association (ATSSA)

Contact: ATSSA, 5440 Jefferson Davis Highway, Fredericksburg, VA 22407-2673

Telephone/Fax: Tel: (800) 898-5400, (540) 898-5400, Fax: (540) 898-5510

E-mail/Other: E-mail: general@atssa.com, Web Site: <http://www.atssa.com>

Cost/terms: ATSSA members and public agencies \$25, non-members \$50

Description: This video explores why work zones are more dangerous at night and suggests techniques and devices to make them safer.

Target audience: Those responsible for work zone traffic control

Quality Standards for Work Zone Control Devices

Product: Manual

Date produced: 1993

Source: American Traffic Safety Services Association (ATSSA)

Contact: ATSSA, 5440 Jefferson Davis Highway, Fredericksburg, VA 22407-2673

Telephone/Fax: Tel: (800) 898-5400, (540)

898-5400, Fax: (540) 898-5510

E-mail/Other: E-mail: general@atssa.com,

Web Site: <http://www.atssa.com>

Cost/terms: ATSSA members and public agencies \$2.50, non-members \$3.75

Description: This booklet helps contractors and highway agency personnel judge when traffic control devices are no longer effective and need to be replaced. Color photographs and/or written descriptions of work zone devices illustrate three levels of condition: acceptable, marginal and unacceptable. Devices described include signs, barricades, drums, cones, tubes, warning lights, arrow panels, changeable message signs and pavement markings.

Target audience: Highway agency personnel, contractors

School Transportation and Traffic Safety

Product: Manual

Date produced: 1996-97

Source: Missouri Highway Transportation Department

Contact: Jim Radmacher, Technology Transfer Engineer, LTAP Director, Missouri Highway and Transportation Department, P.O. Box 270, Jefferson City, MO 65102

Telephone/Fax: Tel: (573) 751-0852, Fax: (573) 526-4337

Cost/terms: Available upon request

Description: This guidebook for local agencies offers assistance for school route plan information.

Target audience: Government agencies, school officials, parent-teacher organizations

Seminar for Traffic Engineering Technical Assistants

Product: Course

Date produced: 1995

Source: Northwestern University Traffic Institute

Contact: Robert K. Seyfried, Director, Transportation Engineering, Northwestern University Traffic Institute, 405 Church St., Evanston, IL 60204

Telephone/Fax: Tel: (800) 323-4011, (847)

491-5040, Fax: (847) 491-5270

E-mail/Other: Web site: [http://](http://www.nwu.edu/traffic)

www.nwu.edu/traffic

Cost/terms: Cost available on request

Description: This workshop is designed to improve skills in conducting traffic surveys, field investigations, data collection and analysis, and application of traffic control devices. The workshop includes lectures and demonstrations, as well as supervised work sessions and field studies. The curriculum prepares technicians to perform many basic traffic survey, analysis and application techniques with a minimum of engineering assistance and direction.

Target audience: Technicians, police officers, local officials responsible for performing traffic studies

Strategies for Urban Traffic Congestion

Product: Course

Date produced: 1993

Source: Northwestern University Traffic Institute

Contact: Robert K. Seyfried, Director, Transportation Engineering, Northwestern University Traffic Institute, 405 Church St., Evanston, IL 60204

Telephone/Fax: Tel: (800) 323-4011, (847)

491-5040, Fax: (847) 491-5270

E-mail/Other: Web site: [http://](http://www.nwu.edu/traffic)

www.nwu.edu/traffic

Cost/terms: Cost available on request

Description: This workshop provides participants with an understanding of the methods and tools available to evaluate traffic conditions and test alternative strategies to better manage congestion. Strategies to alleviate congestion-related problems on the freeway, arterial, and residential street systems, as well as throughout the transportation network, are identified.

Target audience: Traffic engineers and planners from government agencies

Thin Orange Line

Product: Videocassette (32 min.)

Date produced: 1990

Source: American Traffic Safety Services Association (ATSSA)

Contact: ATSSA, 5440 Jefferson Davis Highway, Fredericksburg, VA 22407-2673

Telephone/Fax: Tel: (800) 898-5400, (540)

898-5400, Fax: (540) 898-5510

E-mail/Other: E-mail: general@atssa.com,

Web Site: <http://www.atssa.com>

Cost/terms: ATSSA members and public agencies \$25, non-members \$50

Description: A two-part training video for construction inspectors responsible for traffic operations in work zones. Part one covers the objectives and principles, standards, and design of work zone traffic control. Part two guides the viewer through typical inspections that are required to ensure the safe maintenance of traffic and contractor compliance to the standards. Includes 25 Inspector's Guides.

Target audience: Inspectors, supervisors

Top Ten Cards

Product: Reference Card

Date produced: 1996

Source: American Traffic Safety Services Association (ATSSA)

Contact: ATSSA, 5440 Jefferson Davis Highway, Fredericksburg, VA 22407-2673

Telephone/Fax: Tel: (800) 898-5400, (540)

898-5400, Fax: (540) 898-5510

E-mail/Other: E-mail: general@atssa.com,

Web Site: <http://www.atssa.com>

Cost/terms: Call for pricing information

Description: ATSSA's Safety Committee developed a Top Ten List of Temporary Traffic Control. This laminated wallet card displays the ATSSA logo and features guidelines for providing safe work zone traffic control. It is intended to be a checklist for traffic control supervisors providing the ten most important items to consider when maintaining an effective traffic control system. Companies may also choose to have their company logo displayed on the card.

Target audience: Those who work in or near traffic control areas

Traffic Accident Data Analysis: Identification of High Accident

Locations

Product: Slide tape

Date produced: 1985

Source: Department of Civil Engineering, West Virginia University

Contact: Ronald W. Eck, Professor of Civil Engineering, West Virginia University, P.O. Box 6103, Morgantown, WV 26506-6103

Telephone/Fax: Tel: (304) 293-3031 ext. 627, Fax: (304) 293-7109

E-mail/Other: E-mail: blanken@cemr.wvu.edu

Cost/terms: Available from contact

Description: This presentation covers accident record systems, procedures for identifying high-hazard locations, and procedures for identifying patterns of accident occurrence.

Target audience: Engineers, administrators, enforcement personnel

Traffic and Transportation Engineering Seminar

Product: Course

Date produced: 1995

Source: Northwestern University Traffic Institute

Contact: Robert K. Seyfried, Director, Transportation Engineering, Northwestern University Traffic Institute, 405 Church St., Evanston, IL 60204

Telephone/Fax: Tel: (800) 323-4011, (847)

491-5040, Fax: (847) 491-5270

E-mail/Other: Web site: <http://www.nwu.edu/traffic>

Cost/terms: Cost available on request

Description: This workshop presents a comprehensive overview of traffic and transportation engineering to professionals in this field. The emphasis of this seminar is to provide solutions for urban and rural transportation problems and to facilitate the management of transportation systems. Among the areas covered are traffic analysis and operations, transportation studies, intersection capacity, traffic and highway planning, geometric design and transportation systems management.

Target audience: Engineers with traffic or transportation responsibilities

Traffic Control in Urban/Utility Work Zones

Product: Course

Videocassette (55 min.)

Slide-tape

Date produced: 1991

Source: American Traffic Safety Services Association (ATSSA)

Contact: ATSSA, 5440 Jefferson Davis Highway, Fredericksburg, VA 22407-2673

Telephone/Fax: Tel: (800) 898-5400, (540) 898-5400, Fax: (540) 898-5510

E-mail/Other: E-mail: general@atssa.com,
Web Site: <http://www.atssa.com>

Cost/terms: ATSSA members and public agencies \$250/slide-tape, \$50/video, non-members \$400/slide-tape, \$100/video

Description: This course provides the participant with a working knowledge of how to set up work zones for smaller jobs of short duration frequently encountered in urban settings. It is offered as a one-day course and is open to approximately 50 students. A two-part slide-tape program is presented as a part of the course and is available for sale to assist in training employees. This program was originally produced by the Institute of Transportation Engineers and has been revised and updated by ATSSA.

Target audience: Supervisors, crew leaders

Traffic Engineering Fundamentals

Product: Course

Date produced: 1991

Source: Transportation Research Center, University of Florida

Contact: William M. Sampson, McTrans Manager, University of Florida, 512 Weil Hall, P.O. Box 116585, Gainesville, FL 32611-6585
Telephone/Fax: Tel: (352) 392-0378, Fax: (352) 392-3224

E-mail/Other: E-mail: mctrans@ce.ufl.edu

Cost/terms: Ask contact

Description: This two and one half day course is designed for those new to traffic engineering or those who interact with traffic engineering on a regular basis. Lectures are alternated with hands-on microcomputer applications to show how these programs can be effective tools of the profession. The course covers the fundamentals of several aspects of traffic engineering, including: traffic control devices, signs, markings, signals, accidents, and capacity and signal timing. A one-day version is also available.

Target audience: Individuals new to traffic engineering

Traffic Management of Land Development

Product: Course

Date produced: 1993

Source: Northwestern University Traffic Institute

Contact: Robert K. Seyfried, Director, Transportation Engineering, Northwestern University Traffic Institute, 405 Church St., Evanston, IL 60204

Telephone/Fax: Tel: (800) 323-4011, (847) 491-5040, Fax: (847) 491-5270

E-mail/Other: Web site: <http://www.nwu.edu/traffic>

Cost/terms: Cost available on request

Description: This workshop presents the methodology, techniques, developments, the determination of internal and external site transportation requirements, the development of transportation-related land use controls, and the use of legal and administrative tools. The relationship between land use and traffic service is emphasized to ensure coordinated planning, practical design and

implementation of recommendations.
Target audience: Engineers and planners

Work Zone Traffic Control Setup and Removal

Product: Videocassette
Date produced: 1986
Source: Pennsylvania Department of Transportation
Contact: Pennsylvania Department of Transportation Employees Library, Forum Place, 555 Walnut St., 8th Floor, Harrisburg, PA 17101-1900
Telephone/Fax: Tel: (717) 787-6527, Fax: (717) 772-8282
Cost/terms: \$35
Description: This videocassette covers work zone traffic control set up and removal for short term operations (AV#00477).
Target audience: Supervisors and work crews

Work Zone Traffic Control Short Term, Parts 1 and 2

Product: Videocassette and workbook
Date produced: 1983
Source: Pennsylvania Department of Transportation
Contact: Pennsylvania Department of Transportation Employees Library, Forum Place, 555 Walnut St., 8th Floor, Harrisburg, PA 17101-1900
Telephone/Fax: Tel: (717) 787-6527, Fax: (717) 772-8282
Cost/terms: \$35
Description: This videotape covers work zone traffic control (AV#00205).
Target audience: Supervisors and work crews

Work Zone Traffic Control Workshop

Product: Course
Date produced: 1994
Source: Northwestern University Traffic Institute
Contact: Robert K. Seyfried, Director, Transportation Engineering, Northwestern University Traffic Institute, 405 Church St., Evanston, IL 60204
Telephone/Fax: Tel: (800) 323-4011, (847)

491-5040, Fax: (847) 491-5270
E-mail/Other: Web site: <http://www.nwu.edu/traffic>
Cost/terms: Cost available on request
Description: This workshop will train participants to recognize the importance of proper traffic control for the safety of road users and workers, and to select the appropriate traffic control devices and procedures based on the nature of the roadway and the work zone. This course is intended to provide the kind of training in work zone traffic control recommended by the Manual on Uniform Traffic Control Devices which indicates that "individuals who are trained in the principles of safe traffic control should be assigned responsibility for safety at work sites."
Target audience: Field personnel of construction contractors, public agencies or utility companies

Worksite Traffic Supervisors Training Course

Product: Course
Date produced: 1977, revised 1994
Source: American Traffic Safety Services Association (ATSSA)
Contact: ATSSA, 5440 Jefferson Davis Highway, Fredericksburg, VA 22407-2673
Telephone/Fax: Tel: (540) 898-5400, (800) 272-8772
Cost/terms: Contact ATSSA's Education Department
Description: This 20 hour training course has been offered by ATSSA since 1978. The course is presented over 60 times per year during the fall and winter months at various locations. The course is designed to help participants to identify and apply workable concepts and techniques for installing and maintaining worksite traffic control systems; monitor the effectiveness of installations and implement needed changes; and understand legal, environmental and administrative problems and relevant solutions. The successful completion of the exam given at the end of the course is one of the requirements for certification by ATSSA as a Worksite Traffic Supervisor or Worksite Traffic Technician.

Continuing Education Units are available for an additional fee paid in advance.

Target audience: Supervisors, technicians, service personnel

Title Index



AASHTO Publications	19
Accident Reconstruction for Traffic Managers	53
Adopt-a-Road: Program and Roadside Safety Training	73
Advance Warning Arrow Panels: Positive Guidance	81
Advanced TRANSYT-7F Training Course	19
AEMA: Paving the Way to the 21st Century	27
AIMS Multimedia	35
American Association of State Highway and Transportation Officials (AASHTO)	35
American Public Works Association (APWA)	35
American Road and Transportation Builders Association (ARTBA)	36
American Society of Civil Engineers (ASCE)	36
American Traffic Safety Services Association (ATSSA)	36
Arterial Analysis Package Training Course	19
Asphalt Cold-Mix Manual	27
Asphalt Cold-Mix Recycling	57
Asphalt Emulsion Manufacturers Association (AEMA)	36
Asphalt Emulsion Spray Applications	27
Asphalt Handbook	27
Asphalt Hot-Mix Recycling	57
Asphalt in Hydraulics	27
Asphalt in Pavement Maintenance	57
Asphalt Institute	37
Asphalt Maintenance Techniques	28
Asphalt Overlays for Highway and Street Rehabilitation	57
Asphalt Overlays for Rehabilitation	57
Asphalt Pavement Maintenance Workshop	58
Asphalt Pavement Technology and Inspection Workshop	58
Asphalt Pavement Thickness Design	58
Asphalt Pocketbook of Useful Information	28
Asphalt Recycling and Reclaiming Association (ARRA)	37
Asphalt Surface Treatments — Construction Techniques	59
Asphalt Surface Treatments — Specifications	59
Asphalt Use in Water Environments	28
Asphalt-PASER Manual	58
Back Safety/Construction Fall Protection	73
Backhoe Loader Maintenance and Transport	9
Backhoe Loader Pre-Start Inspection	9
Backhoe Loader Safe Operating Techniques	9
Backing: You Owe It to Yourself	9
Balancing Production Rates in Hot-Mix Asphalt Operations	59
Barrier Delineation in Work Zones: The Well-Defined Path	87
Basic Asphalt Emulsion Manual	28

Basic Equipment Operation Series.....	9
Basic Forklift Principles	10
Basic Sign Installation	81
Basic Urban Transportation Planning	45
The Basics of a Good Road.....	45
The Training Network	43
Benefits of Correct Commercial Driveway Construction.....	45
Bergwall 1996 Safety & Technical Skills Training Catalog.....	73
Bicycle Planning and Facilities Workshop	45
Bidding Documents for Small Road Projects	21
Bridge Maintenance System	5
Bridge Safety Inspection for Local Governments	5
Budgeting for Rehabilitation.....	59
Building or Replacing Intersections with Concrete	59
Bureau of Transportation Statistics (BTS).....	37
Bureau of Transportation Statistics Services and Products Catalog	19
Cause and Prevention of Stripping in Asphalt Pavements (Second Edition).....	60
Center for Microcomputers in Transportation (McTrans)	37
Chip Seals and Surface Treatments.....	28
Claims, Pains and Automobiles: Municipal Roads and Tort Liability.....	53
Cold Mix Recycling	29
Concrete Pavement Rehabilitation Package.....	60
Concrete Testing	29
Concrete-PASER Manual.....	60
Confined Space Atmospheric Testing.....	73
Confined Space Hotwork	74
Confined Space Ventilation.....	74
Construction Industry Manufacturers Association (CIMA)	37
Construction Metrication Council	38
Construction Specifications for Asphalt Curbs and Gutters	29
Construction Zone Safety Inspector Course	74
Contaminated Soil Remediation	29
Conveyor Maintenance Safety (Aggregate Operations)	10
Cool Concrete: The Earth-Friendly Pavement Material.....	29
Cooling System Maintenance for Diesel Equipment	10
Crack Sealing.....	60
Crane Setup for Safety	10
Crawler Excavator Maintenance and Transport.....	10
Crawler Excavator Pre-Start Inspection	11
Crawler Excavator Safe Operating Techniques	11
Creating an Artistic Concrete Intersection	60
The Deposition	53
Design and Construction of Joints in Concrete Streets	61
Design Concepts from AASHTO	46
Design of Concrete Pavement for City Streets.....	61
Design of HMA Pavements for Commercial, Industrial and Residential Applications.....	46
Drainage of Asphalt Pavement Structures.....	7
Drainage Pipe Installation	7
Drainage, Drainage, Drainage: The Importance of Drainage on Local Roads.....	7
The Effect of Land Development on Transportation.....	46
Equipment Operation: Truck-Mounted Excavator Series	11

Erosion and Sedimentation Control Highway Construction	7
Erosion Control Material Installation: Demonstration	7
Extra Eyes on Maintenance	53
Fast Track Concrete Pavements	61
Fast Track Concrete Pavements: More than Just High-Early Strength	30
First Aid on the Job	75
Fixed Form Paving: A Lost Art	62
Flagger Training Course	87
Flagging and the Flagger	87
Flagging Handbook	87
Flagging: Work Zone Traffic Control	88
Full-Depth Asphalt Pavement for Parking Lots, Service Stations and Driveways (Fifth Edition)	62
Full-Depth Repair of Concrete Pavements	62
Fundamentals of Geometric Design	46
Geometric Design Workshop	47
Geosynthetics Workshop for Municipal and State Engineers	30
Getting the Good Buy	21
Getting Your Message Understood: Communicating with	21
Government Institutes' Environmental and Occupational Health & Safety Catalog	75
Grader Operator Training Manual	11
Grader Operator Training Manual	11
Gravel-PASER Manual	62
A Guide to Federal-Aid Programs, Projects, and Other Uses of Highway Funds	47
Guidelines for the Use of Portable Changeable Message Signs	81
Hand Safety	75
Hand Signal Communication (Mobile Crane)	12
Handbook on Accident Reconstruction	54
Hauling Hot-Mix Asphalt	12
Hazard Communication	75
Hazards to Motor Vehicles and Pedestrians at Urban Construction Projects	76
HAZCOM Videos	76
Highway Capacity Analysis Training Course	88
Highway Capacity Workshop - Arterial Streets and Intersections	89
Highway Capacity Workshop	88
Highway Capacity	88
Highway Design	47
Highway/Utility Coordination Issues	47
Highway/Utility Guide	48
Highway-Railroad Grade Crossing Workshop	89
Hot-Mix Asphalt Joint Construction	62
Hot-Mix Asphalt Paving Handbook	63
How to Design Full-Depth Asphalt Pavements for Streets	63
How to Prevent Segregation	63
How to Reseal Pavement Joints	63
Idea Store Series	21
Ideas That Make a Difference Series	22
Identification and Treatment of High Hazard Locations	76
Indian Reservation Roads Program: Rules of the Game	23
Institute of Transportation Engineers (ITE)	38
Intelligent Transportation Society (ITS) America	38

Interlocking Concrete Pavement Institute (ICPI).....	38
International City/County Management Association (ICMA)	39
International Road Federation (IRF)	39
International Slurry Surfacing Association (ISSA)	39
Intersection Design and Channelization Workshop	48
Intersection Joint Layout	64
Introduction to Asphalt (Eighth Edition)	30
Introduction to Traffic Practices.....	89
Job Site Safety Training for Your Employees	76
Joint and Crack Sealing and Repair for Concrete Pavements	64
Joint Sealing	64
Just Another Job	24
Leading and Building Your Team	24
Legal Liability Workshop	54
Life in the Closed Lane	89
Load Posted Bridges	5
Lockout/Tagout of Energy Sources	12
Low-Cost Improvements for Two-Lane Highways.....	90
Maintenance of Signs and Pavement Markings	81
Maintenance Welding Series: General Welding Safety and Tank Repair; Gas Welding and Metal Identification; Arc Welding	12
Management and Supervisory Skills Workshop	24
Managerial Skills for Transportation Engineers	24
Manual on Uniform Traffic Control Devices (MUTCD) on CD-ROM	90
The Manual on Uniform Traffic Control Devices Part VI - Standards and Guides for Traffic Controls for Street and Highway Construction, Maintenance, Utility and Incident Management Operations	90
Manual Pothole Patching	64
Microcomputer Applications in Signal Timing.....	82
Microsurfacing...Use Application and Inspection.....	64
Mix Design Methods for Asphalt Concrete and Other Hot-Mix Types	30
Model Construction Specifications for Asphalt Concrete and Other Plant-Mix Types.....	30
Municipal Equipment Management System (MEMS)	13
NACE International	39
National Asphalt Pavement Association (NAPA)	40
National Association of County Engineers (NACE)	40
National Highway Traffic Safety Administration (NHTSA) Office of Traffic Safety Programs	40
New Directions in Sign Management.....	82
Nighttime Traffic Control in Work Zones	90
Northwestern University Traffic Institute.....	41
Operating a Forklift Safely	13
Overhead Crane Safety	13
Pan American Institute of Highways (PIH)	41
Parking Facility Planning and Design Workshop	48
Pavement Maintenance with Asphalt	65
Pavement Maintenance Workshop for State and Local Agencies	65
Pavement Management Educational Video Library Series	65
Pavement Marking Inspection Course	82
Pavement Marking Inspection: Thermoplastic.....	31
Pavement Marking Inspection: Traffic Paint.....	31

Pavement Marking Inspection: Two-Part Epoxy	31
Pavement Marking Technician Training Course	82
A Pavement Rating System for Low-Volume Asphalt Roads.....	65
Pavement Smoothness	65
Paver Operations for Quality	13
Paving and Compaction Training.....	13
Paving Techniques	66
PC-TRANS	41
Pedestrian Planning and Facilities Workshop	48
Performance Graded Asphalt Binder Specification and Testing	31
Performance Graded Asphalt Specification and Testing	32
Personal Protective Equipment	77
Pile Cap Replacement	5
Pipe Placement	8
Placing Asphalt Hot-Mix	66
Portland Cement Association	41
Power Operations for Quality	14
Pre-Operational Inspection (Mobile Crane)	14
Presentation Skills for Transportation Professionals.....	25
Pre-stressed Concrete Bridge: Safety Inspection	6
Preventive Maintenance Around the Vehicle	14
Preventive Maintenance In-Cab	14
Preventive Maintenance Under the Hood	14
Preventive Maintenance Under the Vehicle	15
Principles of Construction of Hot-Mix Asphalt Pavements.....	66
Proper Use of Isolation and Expansion Joints in Concrete Pavements.....	66
Public Risk Management Association (PRIMA).....	42
Quality Standards for Work Zone Control Devices	91
Recycling Roads with Asphalt Emulsions	67
Rehabilitation of Portland Cement Concrete Pavements Using Hot-Mix Asphalt Overlays	67
Rehabilitation of Portland Cement Concrete Pavements Using Hot-Mix Asphalt Overlays	67
Resealing Concrete Pavement Joints.....	67
Response to Winter	85
Right Before Your Eyes	83
Right-of-Way Mowing Safety	77
Right-to-Know Series	54
Risk Management to Reduce Highway Tort Liability	55
Risk Management	54
Risk Management: Tort Litigation	55
ROADWARE Version 6.0	20
Roadway Design Workshop	49
Roadway Fundamentals for Municipal Officials	49
Roller Operations for Quality	15
Rubber Tire Roller Calibration	15
Safe Conveyor Operation.....	15
Safety Design for Streets and Highways	49
Safety for Adopt-a-Highway Volunteers.....	77
Safety Orientation	77
Safety Shorts	42

Safety Six.....	16
Safety Training for Repair Technicians	77
Salt Institute	42
Sampling Aggregate and Aggregate Mixtures	32
Sampling Aggregates.....	32
Sampling and Testing of Plastic Concrete	32
Sampling Asphalt Products for Specification Compliance (Second Edition).....	33
Sand Equivalent Test	33
Scale-Resistant Concrete Pavements.....	68
School Transportation and Traffic Safety	91
Scour the Bridge: Engineers' Dilemma.....	6
Scrap Tire Utilization Technologies	8
Selective Pavement Rehabilitation	68
Seminar for Traffic Engineering Technical Assistants	91
Shadow of Safety: Truck Mounted Attenuator	16
A Simplified Method for the Design of Asphalt Overlays for Light-to-Medium Traffic Pavements	68
Slab Stabilization Guidelines for Concrete Pavements.....	68
Slips, Trips and Falls	78
Slurry Seal	33
Small Highway Department Management Using Principles of TQM.....	25
Snow and Ice Control: A Review of Innovative Practices	85
The Snowfighters	85
So You're Gonna Make a Video	25
Standard Highway Signs	83
Steel Structures Painting Council (SSPC)	42
Strategic Highway Research Program (SHRP) Information Clearinghouse.....	42
Strategies for Urban Traffic Congestion	91
A Striper's Survival Guide	78
Subgrades	33
Subsurface Utility Engineering - A Proven Solution.....	49
Subsurface Utility Engineering Handbook	50
Suggested Specifications for Construction of Concrete Streets.....	68
Summary Report: The Breakaway Timber Utility Pole - A Survivable Alternative.....	50
Superpave Mix Design	33
Surface Treatment Equipment Calibration	16
Surveying Methods for Local Highway Departments.....	20
Thickness Design for Concrete Highway and Street Pavements	69
Thickness Design-Asphalt Pavements for Heavy Wheel Loads	69
Thickness Design-Asphalt Pavements for Highways and Streets	69
Thin Orange Line	92
Timber Bridge Conference: Build Better and Save with Timber Bridges Series.....	6
Timber Bridge Update #1.....	6
Title: American Concrete Pavement Association (ACPA).....	35
Top Ten Cards	92
Tort Awareness	55
Torts Are Everybody's Business.....	55
Towing: You Owe It to Yourself Series	16
Traffic Accident Data Analysis: Identification of High Accident Locations	92
Traffic and Transportation Engineering Seminar.....	92
Traffic Control Devices Workshop	83

Traffic Control in Urban/Utility Work Zones	93
Traffic Engineering Fundamentals	93
Traffic Management of Land Development	93
Traffic Signal Retiming for Intersections and/or Arterial Streets	84
Traffic Signal Workshop — Traffic Actuated Control	84
Traffic Signal Workshop	84
Transport Trailer Safety	16
Transportation Systems Management	25
TRANSYT-7F Training Course	20
Trench Emergency	78
Trench Shoring/Confined Space Entry	78
Trenching and Shoring	79
Ultra-Thin Whitetopping CD-ROM Library	70
Ultra-Thin Whitetopping	69
Ultra-Thin Whitetopping	70
Ultra-Thin Whitetopping: Today's Choice for Durable Pavement Overlays	70
Unbonded Concrete Overlays	34
Understanding Superpave Mix Design	34
Upgrading Your Roads	50
Urban Street Design	50
Utility Cuts and Full-Depth Repairs in Concrete Streets	70
Vegetation Management Workshop	8
We All Live Downstream	8
Wheel Loader Operating Techniques	17
Wheel Loader Walk-Around and Introduction	17
Whitetopping	71
Without Due Process	79
Work Zone Traffic Control Setup and Removal	94
Work Zone Traffic Control Short Term, Parts 1 and 2	94
Work Zone Traffic Control Workshop	94
Working Crane Near Power Lines (Mobile Cranes)	17
Worksite Traffic Supervisors Training Course	94
Writing Skills for Transportation Professionals	26
Your Summer Job/Your Summer Safety	79

LTAP T² Centers



Alabama: Alabama Technology Transfer Center, Department of Civil Engineering, Harbert Engineering Center, Auburn University, AL 36849-5337 **Telephone:** (334) 844-4320, **Fax:** (334) 844-6290, **E-mail:** tsqjrmc@eng.auburn.edu

Alaska: Alaska Transportation Technology Transfer Program, 2301 Peger Road, Fairbanks, AK 99709-5399 **Telephone:** (907) 451-5320, **Fax:** (907) 451-2313, **E-mail:** Sharon_McLeod-Everette@dot.state.ak.us, Jim_Bennett@dot.state.ak.us, Susan_Earp@dot.state.ak.us

Arizona: Arizona Technology Transfer Center, Arizona DOT, 1130 North 22nd Ave., 069R, Phoenix, AZ 85009 **Telephone:** (602) 255-8712, **Fax:** (602) 256-7648, **E-mail:** A1294@atrc.dot.state.az.us

Arkansas: Arkansas LTAP, P. O. Box 2261, Little Rock, AR 72203 **Telephone:** (501) 569-2249, **Fax:** (501) 569-2476, **In-state phone:** (800) 344-1285, **E-mail:** tmhp032@ahd.state.ar.us

California: University of California Technology Transfer Program, ITS Extension Programs, Richmond Field Station, 1355 South 46th Street, Building 452, Richmond, CA 94804-4603 **Telephone:** (510) 231-9590, **Fax:** (510) 231-9591, **E-mail:** abennett@uclink.berkeley.edu, ccortely@library.berkeley.edu

Colorado: Colorado Transportation Information Program, Colorado State University, Engineering Research Center, Room A327, Ft. Collins, CO 80523 **Telephone:** (800) 262-7623, **Fax:** (970) 491-8334, **E-mail:** erctranspo@vines.colostate.edu

Connecticut: Technology Transfer Center, University of Connecticut, 179 Middle Turnpike U-202, Storrs, CT 06269-5202 **Telephone:** (860) 486-5400, **Fax:** (860) 486-2399

Delaware: Delaware DOT T² Center, P. O. Box 778, Dover, DE 19903 **Telephone:** (302) 739-3167, **Fax:** (302) 739-2251, **E-mail:** lklepner@smtp.dot.state.de.us

Florida: Florida Technology Transfer Center, P.O. Box 116585, 512 Weil Hall, University of Florida, Gainesville, FL 32611-6585 **Telephone:** (352) 392-0378, **Fax:** (352) 392-3224, **In-state phone:** Suncom: 622-0378/National 800-number: (800) 226-1013 mess., **E-mail:** t2@ce.ufl.edu

Georgia: Georgia Department of Transportation Technology Transfer Center, No. 2 Capitol Square, Room 301, Atlanta, GA 30334-1002 **Telephone:** (404) 656-5364, **Fax:** (404) 656-3507, **In-state phone:** (800) 869-1040, **E-mail:** dtprras@dot.state.ga.us

Hawaii: Hawaii Local Technical Assistance Program, 2800 Woodlawn Drive, Suite 280, Honolulu, HI 96822 **Telephone:** (808) 539-3837; (800) 220-5827, **Fax:** (808) 539-3842; (800) 787-5827, **In-state phone:** (808) 539-3837; (800) 220-5827 (Neighbor Islands), **E-mail:** huizingh@hawaii.edu, juli@hawaii.edu

Idaho: Idaho Technology Transfer Center, University of Idaho, Moscow, ID 83844-0911 **Telephone:** (208) 885-4334, **Fax:** (208) 885-2877, **E-mail:** idahot2@uidaho.edu

Illinois: Illinois Technology Transfer Center, Illinois Dept. of Transportation, 2300 S. Dirksen Parkway Room 205, Springfield, Illinois 62764 **Telephone:** (217) 785-5048, **Fax:** (217) 785-7296

Indiana: Highway Extension and Research Project for Indiana Counties and Cities (HERPICC), Purdue University, 1284 Civil Engineering Building, West Lafayette, IN 47907-1284 **Telephone:** (317) 494-2164, **Fax:** (317) 496-1176, **In-state phone:** (800) 428-7639, **E-mail:** lmccorma@ecn.purdue.edu

Iowa: Center for Transportation Research and Education, Iowa State University, ISU Research Park, 2625 North Loop, Suite 2100, Ames, IA 50010-8615 **Telephone:** (515) 294-8103, **Fax:** (515) 294-0467, **E-mail:** desmith@iastate.edu

Kansas: Kansas University Transportation Center, 2011 Learned Hall, Lawrence, KS 66045 **Telephone:** (913) 864-5658, **Fax:** (913) 864-3199, **In-state phone:** (800) 248-0350, **E-mail:** raymoore@kuhub.cc.ukans.edu (Ray Moore), weaver@kuhub.cc.ukans.edu (Pat Weaver), givechi@kuhub.cc.ukans.edu (Mehrdad Givechi), lmharris@falcon.cc.ukans.edu (Lisa Harris)

Kentucky: Kentucky Transportation Center, 140 Civil Engineering, Kentucky Transportation Center Building, University of Kentucky, Lexington, KY 40506-0281 **Telephone:** (606) 257-4513, **Fax:** (606) 257-1815, **In-state phone:** (800) 432-0719, **E-mail:** panderso@engr.uky.edu

Louisiana: Louisiana LTAP T² Center, 4101 Gourrier Avenue, Baton Rouge, LA 70808-4443 **Telephone:** (504) 767-9117, **Fax:** (504) 767-9156, **In-state phone:** (800) 256-1567, **E-mail:** laltap@ltrc.lsu.edu

Maine: Maine Local Roads Center, Community Services Division, Maine DOT, 16 State House Station, Augusta, ME 04333-0016 **Telephone:** (207) 287-2152, **Fax:** (207) 287-3292, **E-mail:** peter.coughlan@state.me.us

Maryland: Maryland Transportation Technology Transfer Center, Department of Civil Engineering, University of Maryland, College Park, MD 20742 **Telephone:** (301) 405-2009, **Fax:** (301) 405-2585, **E-mail:** ttc@eng.umd.edu

Massachusetts: Baystate Roads Program, 2140 Marston Hall, University of Massachusetts, Amherst, MA 01003 **Telephone:** (413) 545-2604, **Fax:** (413) 545-6471, **In-state phone:** (800) 374-7623, **E-mail:** ahmadjia@ultranet.com

Michigan: Local Technical Assistance Program, TTTC, Michigan Technological University, 1400 Townsend Drive, Houghton, MI 49931-1295 **Telephone:** (906) 487-2102, **Fax:** (906) 487-3409, **E-mail:** tlmcninc@mtu.edu

Minnesota: Minnesota Technology Transfer Program, Center for Transportation Studies, 511 Washington Avenue, SE, 200 Transportation and Safety Building, Minneapolis, MN 55455 **Telephone:** (612) 625-5829 or (612) 625-8049, **Fax:** (612) 625-6381, **E-mail:** trend010@maroon.tc.umn.edu, or donah007@maroon.tc.umn.edu

Mississippi: Mississippi Center for Technology Transfer, Jackson State University, 1400 J.R. Lynch Street, P. O. Box 18125, Jackson, MS 39217-0625 **Telephone:** (601) 968-2339, **Fax:** (601) 973-3703, **In-state phone:** (800) 634-4651, **E-mail:** tsquare@ccaix.jsums.edu

Missouri: Transportation T² Center - Missouri, Missouri Highway & Transportation Department, P. O. Box 270, Jefferson City, MO 65102 **Telephone:** (573) 751-0852, **Fax:** (573) 526-4337

Montana: Local Technical Assistance Center, Montana State University, 202 Cobleigh Hall, Bozeman, MT 59717-0390 **Telephone:** (800) 541-6671, **Fax:** (406) 994-6105, **E-mail:** zce7002@trex.oscs.montana.edu

Nebraska: Nebraska Technology Transfer Center, University of Nebraska-Lincoln, P. O. Box 880560, 900 North 16th St., Lincoln, NE 68588-0560 **Telephone:** (402) 472-5748, **Fax:** (402) 472-0685, **In-state phone:** (800) 332-0265, **E-mail:** billbow@unlinfo.unl.edu

Nevada: Nevada Transportation T² Center, College of Engineering/257, University of Nevada-Reno, Reno, NV 89557 **Telephone:** (702) 784-1433, **Fax:** (702) 784-1429, **E-mail:** maria@unr.edu

New Hampshire: Technology Transfer Center, 33 College Road-Kingsbury Hall, University of New Hampshire, Durham, NH 03824-3591 **Telephone:** (603) 862-2826, **Fax:** (603) 862-2364, **In-state phone:** (800) 423-0060, **E-mail:** kldr@christa.unh.edu

New Jersey: Rutgers R²T² Center, P. O. Box 5079, Center for Government Services, 33 Livingston Avenue, New Brunswick, NJ 08903-5079 **Telephone:** (908) 932-3640 ext. 627, **Fax:** (908) 932-3586, **E-mail:** knezek@aesop.rutgers.edu

New Mexico: New Mexico LTAP Center, P. O. Box 1149, 604 West San Mateo, Santa Fe, NM 87504-1149 **Telephone:** (505) 827-5150 or 827-5281, **Fax:** (505) 827-5167, **In-state phone:** (800) 523-3028

New York: Cornell Local Roads Program, 416 Riley-Robb Hall, Ithaca, NY 14853-5701 **Telephone:** (607) 255-8033, **Fax:** (607) 255-4080, **E-mail:** Center: clrp@cornell.edu

North Carolina: Institute for Transportation Research and Education, North Carolina State University, Campus Box 8601, Raleigh, NC 27695-8601 **Telephone:** (919) 515-8033, **Fax:** (919) 515-8898, **E-mail:** wmv@unity.ncsu.edu

North Dakota: North Dakota Transportation Technology Transfer Center, Civil/Industrial Engineering Building, Room 201H, North Dakota State University, Fargo, ND 58105 **Telephone:** (800) 726-4143 - Fargo Office Only, Fargo Office: (701) 231-7051, Bismarck Office: (701) 328-2658, **Fax:** (701) 231-7195 - Fargo Office Only, **E-mail:** danderse@badlands.nodak.edu

Ohio: Ohio Transportation Technology Transfer Center, The Ohio State University, Department of Civil Engineering, 470

Hitchcock Hall, 2070 Neil Ave., Columbus, OH 43210-1275 **Telephone:** (614) 292-2871, (614) 292-7556, **Fax:** (614) 292-6185, **In-state phone:** (800) 552-6891, **E-mail:** swelsh@magnus.acs.ohio-state.edu, tantrim@magnus.acs.ohio-state.edu

Oklahoma: Center for Local Government Technology, 308 CITD, Oklahoma State University, Stillwater, OK 74078 **Telephone:** (405) 744-6049, **Fax:** (405) 744-7268, **E-mail:** wright@okway.okstate.edu

Oregon: Oregon Technology Transfer Center, 2950 State Street, Room 103, Salem, Oregon 97310-0784 **Telephone:** (503) 986-2854, **Fax:** (503) 986-2844, **In-state phone:** (800) 544-7134, **E-mail:** wesley.HEIDENREICH@state.or.us

Pennsylvania: LTAP - The Pennsylvania Local Road Program, Penn State Eastgate Center, 1010 North 7th Street, Suite 304, Harrisburg, PA 17102-1410 **Telephone:** (717) 772-1972, **Fax:** (717) 772-1998, **In-state phone:** (800) FOR-LTAP, (800) 367-5827, **E-mail:** ltap@psu.edu

Puerto Rico: Puerto Rico Transportation Technology Transfer Center, Civil Engineering Department, University of Puerto Rico at Mayagüez, Mayagüez, PR 00681-5000 **Telephone:** (787) 834-6385, **Fax:** (787) 265-5695, **E-mail:** t2pr1@rmce02.upr.clu.edu

Rhode Island: Rhode Island Technology Transfer Center, Department of Administration, Division of Planning, One Capitol Hill, Providence, RI 02908-5872 **Telephone:** (401) 277-1235, **Fax:** (401) 277-2083

South Carolina: Transportation Technology Transfer Service, Department of Civil Engineering, Clemson University, Clemson, SC 29634-0911 **Telephone:** (864) 656-3000, **Fax:** (864) 656-2670, **E-mail:** jim.burati@ces.clemson.edu

South Dakota: South Dakota Transportation Technology Transfer Service, P.O. Box 2220, HH 302 - SDSU, Brookings, SD 57007 **Tele-**

phone: (800) 422-0129, **Fax:** (605) 688-5880,
In-state phone: (605) 688-4185, **E-mail:**
grants@mgmail.sdstate.edu

Tennessee: Tennessee Transportation Assistance Program, 600 Henley Street, Suite 309, Knoxville, TN 37996-4133 **Telephone:** (423) 974-5255, **Fax:** (423) 974-3889, **In-state phone:** (800) 252-ROAD, **E-mail:** ttap@utk.edu

Texas: Texas Local Technical Assistance Program, TTD, Texas Engineering Extension Service, TAMU System, 301 Tarrow, Room 261, College Station, TX 77843-8000 **Telephone:** (409) 845-4457, **Fax:** (409) 862-4768, **In-state phone:** (800) 824-7303, **E-mail:** trchism@teexnet.tamu.edu, trali@teextnet.tamu.edu, trshaw@teexnet.tamu.edu, trburch@teexnet.tamu.edu, trevans@teexnet.tamu.edu

Utah: Utah Transportation Technology Transfer Center, Department of Civil & Environmental Engineering, Utah State University, Logan, UT 84322-4111 **Telephone:** (801) 797-2289 or (800) 822-8878, **Fax:** (801) 797-1185, **In-state phone:** (800) 822-8878, **E-mail:** utaht2@lab.cce.usu.edu

Vermont: Vermont Local Roads, Saint Michael's College, College Park, Colchester, VT 05439 **Telephone:** (802) 654-2652, **Fax:** (802) 654-2555, **In-state phone:** (800) 462-6555, **E-mail:** lambert@smcvax.smcvt.edu

Virginia: Virginia Transportation Technology Transfer Center, 530 Edgemont Road, Charlottesville, VA 22903 **Telephone:** (804) 293-1966, **Fax:** (804) 293-1429, **E-mail:** cdg3k@virginia.edu

Washington: Northwest T² Center (WA), WSDOT-TransAid, P.O. Box 47390, Olympia, WA 98504-7390 **Telephone:** (360) 705-7390, **Fax:** (360) 705-6822, **In-state phone:** (800) 973-4496, **E-mail:** george_crommes@wsdot.wa.gov

West Virginia: West Virginia Transportation Technology Transfer Center, Dept. of Civil

Engineering, West Virginia University, P. O. Box 6103, Morgantown, WV 26506 **Telephone:** (304) 293-3031 ext. 629, **Fax:** (304) 293-7109, **E-mail:** blanken@cemr.wvu.edu

Wisconsin: Transportation Information Center, University of Wisconsin-Madison, 432 North Lake Street, RM 725A, Madison, WI 53706 **Telephone:** (608) 262-0422, **Fax:** (608) 263-3160, **In-state phone:** (800) 442-4615, **E-mail:** donald@enr.wisc.edu

Wyoming: Wyoming Technology Transfer Center, University Station, P.O. Box 3295, Laramie, WY 82071-3295 **Telephone:** (800) 231-2815, **Fax:** (307) 766-6784, **In-state phone:** (307) 766-6743, **E-mail:** bethht@uwyo.edu, wilsonem@uwyo.edu, calvert@uwyo.edu

American Indian Tribal Government T² Centers

Technology Transfer & Training (T³) Program for Native Americans, Colorado State University, Engineering Research Center, Ft. Collins, CO 80523 **Telephone:** (800) 262-7623, **Fax:** (970) 491-8334, **E-mail:** rchall@vines.colostate.edu

Native American Technology Transfer Center, Montana State University, 202 Cobleigh Hall, Bozeman, MT 59717-0390 **Telephone:** (800) 541-6671, **Fax:** (406) 994-6105, **E-mail:** zce7002@trex.oscs.montana.edu

Tribal Technical Assistance Program, TTTC - Michigan Technological University, 1400 Townsend Drive, Houghton, MI 49931-1295 **Telephone:** (906) 487-3164, **Fax:** (906) 487-3409, **E-mail:** refulton@mtu.edu, aakarsam@mtu.edu

Northwest Tribal LTAP Center, College of Business and Public Administration, Eastern Washington University, 668 North Riverpoint Blvd., Suite A, Spokane, WA 99202-1660 **Telephone:** (509) 359-2230, **Fax:** (509) 359-2267, **E-mail:** dwinchell@ewu.edu

Tribal Government LTAP Center, Center for
Local Government Technology, 308 CITD,
Oklahoma State University, Stillwater, OK
74078-0525 **Telephone:** (405) 744-6049,
Fax: (405) 744-7268, **E-mail:**
padenj@okway.okstate.edu

Tribal LTAP Center, D-Q University, 33250
County Road 31, P.O. Box 409, Davis, CA
95617-0409 **Telephone:** (916) 758-0470,
Fax: (916) 758-4891, **E-mail:**
tribaldq@madre.com

LTAP T² Centers Web Pages

**Alaska**

http://www.dot.state.ak.us/external/state_wide/t2/t2_index.html

Colorado

<http://www.ColoState.EDU/Orgs/COTIP>

Florida

<http://www-t2.ce.ufl.edu>

Georgia

<http://www.dot.state.ga.us/homeoffs/training/techtran/techtran.htm>

Hawaii

<http://hltap.mic.hawaii.edu>

Kentucky

<http://www.engr.uky.edu/KTC/ktctmb.html>

Louisiana

<http://www.ltrc.lsu.edu>

Michigan

<http://WWW.TTTC.MTU.EDU/ltap.html>

Minnesota

<http://www.umn.edu/cts/T2/t2.html>

New Hampshire

<http://pubpages.unh.edu/~kldr/tech.html>

New York

<http://www.cals.cornell.edu/dept/aben/localroads/home.htm>

North Carolina

<http://itre.ncsu.edu/itre/t2/t2.html>

North Dakota

<http://hardhat.cme.ndsu.nodak.edu/t2center/t2.htm>

Ohio

<http://www-transportation.eng.ohio-state.edu/ohiot2/>

Tennessee

<http://www.ra.utk.edu/tc/ttap.html>

Utah

<http://www.engineering.usu.edu/Departments/cee/T2/@utaht2.htm>

Virginia

<http://pratt.vtrc.virginia.edu/vtttc.html>

Washington

<http://www.wsdot.wa.gov/TRANSAID/nwt2.HTM>

West Virginia

<http://www.cemr.wvu.edu/~wwwtmttc>

Tribal LTAP-Colorado

<http://colostate.edu/Orgs/CTP/T3/index.html>

Tribal LTAP-Michigan

<http://WWW.TTTC.MTU.EDU/ttap/TTAPindex.html>

Additions



Title: _____

Product available: ___Course ___Course materials ___Manual ___Slide-tape
___Self-study Text ___Videocassette (___VHS; ___3/4-inch; Length: _____minutes)

___Computer program

Other: _____

Date produced: _____

Original source: _____

Name of contact: _____

Position _____

Institution: _____

Address: _____

City: _____ State: _____ Zip: _____

Phone: (_____) _____

E-mail: _____ Web Page: _____

Cost/terms: (check all that apply) ___Free loan; ___May duplicate; Cost: \$ _____

Other: _____

Description: _____

Target audience: _____

*Return to T² Clearinghouse, American Public Works Association
1301 Pennsylvania Ave NW, Suite 501, Washington, DC 20004 ■ FAX (202) 737-9153*

